

ANNUAL REPORT
OF THE
Department of Lands and Mines
OF THE
PROVINCE OF ALBERTA
FOR THE
Fiscal Year Ended March 31st
1942

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY



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1943

*To the Honourable J. C. Bowen,
Lieutenant-Governor of the Province of Alberta.*

SIR:

I have the honour to submit the report of the Department of Lands and Mines for the fiscal year ended March 31st, 1942.

I have the honour to be, Sir,

Your obedient servant,

N. E. TANNER,

Minister of Lands and Mines.

Edmonton, January 29, 1943.

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GOVERNMENT OF ALBERTA
DEPARTMENT OF LANDS AND MINES

Resulting from the transfer on October 1st, 1930, of Alberta's natural resources from federal to provincial control, the Department of Lands and Mines was on this date brought into being by the Alberta Government. The general purpose of the new Department was to be one of supervision and management of the resources in question.

Ministers of the Department, responsible at different periods for this administration, appear as follows:

Hon. R. G. Reid, appointed October 2nd, 1930,
Hon. Hugh W. Allen, appointed July 10th, 1934,
Hon. Charles C. Ross, appointed September 3rd, 1935,
Hon. N. E. Tanner, appointed January 5th, 1937.

CHIEF OFFICERS
DEPARTMENT OF LANDS AND MINES

March 31st, 1942

Honourable N. E. Tanner	<i>Minister of Lands and Mines</i>
John Harvie	<i>Deputy Minister of Lands and Mines</i>
T. C. Rankine	<i>Departmental Solicitor</i>
V. A. Wood	<i>Director of Lands</i>
M. Gossip	<i>Agent, Calgary Land Agency</i>
R. Cruickshank	<i>Agent, Peace River Land Agency</i>
J. W. Hamilton	<i>Superintendent of Mining Lands</i>
H. Ingrey	<i>Inspector of Mining Rights</i>
T. F. Blefgen	<i>Director of Forestry</i>
E. S. Huestis	<i>Acting Assistant Director of Forestry</i>
F. W. Neilson	<i>Chief Timber Inspector</i>
A. Earnshaw	<i>Radio Superintendent</i>
E. S. Huestis	<i>Fish and Game Commissioner</i>
D. E. Forsland	<i>Superintendent of Game</i>
H. B. Watkins	<i>Superintendent of Fisheries</i>
T. W. Dalkin	<i>Superintendent of the Technical Division</i>
A. A. Millar	<i>Chief Inspector of Mines</i>
E. R. Edwards	<i>Acting Accountant</i>
J. L. Irwin	<i>Statistician</i>

SPECIAL AREAS BOARD

Head Office: Hanna, Alberta

A. C. McCully	<i>Chairman</i>
D. M. Graham	<i>Secretary</i>
J. R. McBeath	<i>Member</i>
J. H. Todrick	<i>Supervisor, Edmonton</i>

SPECIAL DISTRICT AGENTS

D. M. Graham	<i>Hanna</i>
R. B. Langley	<i>Oyen</i>
D. J. Wilson	<i>Consort</i>
S. Cherkas	<i>Lomond</i>

THE PETROLEUM AND NATURAL GAS CONSERVATION BOARD

Head Office: Calgary

J. J. Frawley	<i>Chairman</i>
M. D. Kemp	<i>Member</i>

REPORT

OF THE

Department of Lands and Mines

1941-42

*Honourable N. E. Tanner,
Minister of Lands and Mines,
Edmonton.*

SIR:

I have the honour to submit the twelfth Annual Report of the Department of Lands and Mines for the fiscal year ended March 31st, 1942.

In the report of the previous year, 1940-41, I emphasized the considerable progress made by industrial development during the year, and the Department's relationship to this development in the matter of administration. A similar report is made for the year now under review. The noticeable advancement of these two years has been largely due of course to the ever increasing wartime demands for products manufactured from Alberta's natural resources.

Evidence of the Department's continued progress is given under the heading of Revenue and Production which follows.

New records in departmental revenue and surplus for the year are once again shown, and amongst the increases appearing in production totals of the various natural resources, those of oil, coal and lumber, as in the previous year, are outstanding.

The year 1941-42 has been, needless to say, an extremely active one for all branches of the Department. New duties have been added to old, and old ones have been intensified.

A noticeable addition, both to department personnel and to administrative responsibility, was the transfer at the beginning of the year of the Fisheries and Game Branches from the Department of Agriculture to this Department.

An interesting and important innovation is introduced into this year's report by the appearance of two graphs, in the Accounting Division's section, dealing firstly with gross receipts and secondly with yearly net revenue on income account.

The introduction of these graphs required careful consideration, the desired objective being to show at a glance not only financial progress over a twelve year period but, from a comparative standpoint, the relationship in such progress of surplus to expenditure in the general picture of net revenue.

This has not been previously attempted. The reports of past years' totals coming under these three headings required a careful scrutiny and checking to discover, in the final analysis, their individual relationship to each other.

By the publication of these two graphs, this relationship, over the period of years stated, immediately becomes apparent, and demonstrates at once the rather important point that while totals of surpluses and net revenues have shown a steady and encouraging growth, those of expenditures have remained almost unchanged.

DEPARTMENT'S REVENUE AND PRODUCTION, 1941-42

A surplus of \$1,745,929.82, highest in the Department's history, and an increase of \$384,714.29 over last year's figure, is recorded. All branches of the Department showed an increase, particularly those of Mining Lands and Timber. This record surplus has appeared in spite of increased expenditures. Expenditures totalled \$847,555.32, an increase of \$177,276.47 over last year, caused by operational costs of the Fisheries and Game branches transferred to the Department and by considerably increased fire-fighting costs. Details of these accounts, showing increases and decreases, are given in the Accounting Division's section of this Report.

Petroleum production reached a new high total, with an increase of 996,905 barrels. Natural gas consumption increased by 2,741,300 mcf.

Coal, with a new record, increased by 764,976 tons and briquettes, with an increase of 60,061 tons, almost doubled last year's figure. Electrical power, used in the operation of Alberta coal-mines, increased by 4,313,265 k.w. hours. Coke had a small decrease of 399 tons.

Shale mined during the year increased by 8,495 tons. Bricks manufactured from shale mined showed an increase of 3,707,724, and tiles manufactured from same, an increase of 2,368 tons.

Lumber, manufactured from timber cut on provincial and school lands and on forest reserves, with a total of 272,345,129 F.B.M., showed an increase of 86,592,625 F.B.M. over last year's total figure.

Other production increases appearing for the year are as follows:—stone, 3,961 tons; salt, 8,086 tons; cement, 78,332 barrels; lime, 1,078 tons. A decrease of 765,981 tons is given in production of sand and gravel, together with a decrease of 22 tons in sodium sulphate.

LANDS ADMINISTRATION

Land Agencies.—Land agencies continued to be maintained at Calgary and Peace River. The Lethbridge Agency was discontinued and a sub-agency was opened in its place. The Medicine Hat Sub-agency was discontinued. Sub-agencies in operation during the year were at Bonnyville, Lac La Biche, Athabaska, Hines Creek and Grande Prairie.

School Lands' Timber Administration.—With a view to obtaining centralization the administration of school lands' timber was transferred to the Forestry Division.

Other details surrounding provincial and school lands administration are given in the Director of Lands section of this Report.

FOREST SERVICE

Fire Season.—The worst fire season in the life of this Department occurred within the fiscal year under review. Starting in April in the central part of the province, and continuing, further south, till July, the fires took as toll the life of a watchman of one of the sawmills and a vast quantity of standing timber, presenting as a result, and as will be noted in the accompanying statement, the second highest cost of suppression yet experienced by this Department—\$170,488.53—and the highest total loss of \$2,050,979.43. Loss of human life might well have been considerably increased had it not been for the efforts of the Forestry staff, and the splendid co-operation of the general public.

As will be noticed by the accompanying statement, the results of such a year have brought the grand total of costs of suppression to nearly a million dollars, and of total losses to nearly ten million.

SUMMARY OF FIRE LOSSES WITHIN ALBERTA FOREST RESERVES

Period	Number of Fires	Area (Acres)	Salvage Timber M.f.b.m.	Salvage Timber (Cords)	Unsalvage Timber M.f.b.m.	Unsalvage Timber (Cords)	Cost of Suppression	Total Loss
October 1, 1930 to March 31, 1931.....	9	41,925	2,370.50	3,086.00	2.00	129.00	\$ 551.67	\$ 71.69
April 1, 1931 to December 31, 1931.....	31	52,218.05	8,000.00	15,863.00	6,295.73	111,599.00	17,624.12	154,651.47
Calendar Year 1932.....	32	2,555.75	7.00	3,863.00	3,845.00	1,005.60	3,491.04	8,790.73
Calendar Year 1933.....	39	29,275.88	26.75	19,188.25	19,188.25	108,414.00	18,409.92	95,796.93
Calendar Year 1934.....	47	21,963.00	1,510.00	9,201.00	2,661.00	209,350.00	31,118.51	96,195.87
Calendar Year 1935.....	12	6.50	.....	.....	.....	60.00	94.56	45.50
Calendar Year 1936.....	52	165,465.00	7,573.00	25.00	885,192.00	764,594.48	108,894.48	1,504,273.45
Calendar Year 1937.....	17	90.00	.....	.....	37,500.00	8.50	387.38	292.05
Calendar Year 1938.....	18	13,111.50	13,740.00	5.00	518.50	54,721.00	9,422.79	36,556.45
Calendar Year 1939.....	46	38,213.75	292.00	1,982.00	4,229.00	54,721.00	49,056.68	101,455.13
Calendar Year 1940.....	30	2,929.50	1,000.00	730.00	3.00	3,429.00	6,999.81	14,164.25
Calendar Year 1941.....	22	4,497.00	.....	3,000.00	345.50	2,028.00	2,694.96	15,432.25
TOTALS.....	355	330,367.855	26,520.25	35,092.00	959,779.98	1,255,539.60	\$ 248,745.92	\$2,027,725.77

SUMMARY OF FIRE LOSSES OUTSIDE ALBERTA FOREST RESERVES

Period	Number of Fires	Area (Acres)	Salvage Timber M.f.b.m.	Salvage Timber (Cords)	Unsalvage Timber M.f.b.m.	Unsalvage Timber (Cords)	Cost of Suppression	Total Loss
October 1, 1930 to March 31, 1931.....	47	11,145.19	155.00	104,199.00	3.75	684,625.50	\$ 866.64	\$ 79,950.85
April 1, 1931 to December 31, 1931.....	591	552,658.07	134,536.00	12,215.00	122,690.50	132,743.00	82,088.89	712,835.79
Calendar Year 1932.....	347	133,562.14	274.75	12,215.00	40,627.15	59,545.00	15,320.51	152,085.58
Calendar Year 1933.....	249	64,489.12	4,383.50	13,953.50	41,694.50	59,545.00	16,971.75	100,008.43
Calendar Year 1934.....	193	36,907.00	3,404.50	3,159.00	547.50	14,464.00	7,050.51	29,825.77
Calendar Year 1935.....	85	6,313.25	160.00	1,195.00	1,513.00	5,371.00	1,558.90	5,722.50
Calendar Year 1936.....	196	38,989.00	2,374.00	23,116.00	659.00	6,017.00	13,647.81	45,656.85
Calendar Year 1937.....	358	835,169.00	14,702.00	33,113.00	251,544.00	609,837.00	54,952.28	1,088,173.90
Calendar Year 1938.....	503	1,745,234.00	35,382.50	23,054.00	650,844.50	1,974,651.50	207,632.70	2,009,679.82
Calendar Year 1939.....	453	390,925.50	1,305.00	19,336.00	128,129.00	537,186.00	99,241.41	540,655.08
Calendar Year 1940.....	283	471,314.75	200.00	150.00	141,861.00	775,736.00	60,231.67	939,866.77
Calendar Year 1941.....	423	1,330,927.50	43,710.00	118,480.00	201,674.50	1,905,499.00	167,793.57	2,035,547.18
TOTALS.....	3,728	5,637,634.52	240,587.25	351,970.50	1,581,788.40	6,705,675.00	\$ 727,176.64	\$7,740,008.52

SUMMARY OF FIRE LOSSES WITHIN AND OUTSIDE ALBERTA FOREST RESERVES

Period	Number of Fires	Area (Acres)	Salvage Timber M.f.b.m.	Salvage Timber (Cords)	Unsalvage Timber M.f.b.m.	Unsalvage Timber (Cords)	Cost of Suppression	Total Loss
October 1, 1930 to March 31, 1931.....	56	11,187.115	155.00	107,385.00	5.75	129.00	\$ 1,238.31	\$ 80,022.54
April 1, 1931 to December 31, 1931.....	622	604,876.12	136,906.50	107,385.00	128,986.23	796,224.50	99,713.01	867,487.26
Calendar Year 1932.....	379	136,117.89	282.75	28,078.00	44,472.15	133,748.60	18,811.55	160,876.31
Calendar Year 1933.....	288	93,765.00	4,910.25	15,545.00	60,882.75	167,959.00	35,381.67	195,805.36
Calendar Year 1934.....	240	56,870.00	4,910.25	12,359.00	3,208.50	224,014.00	38,169.02	126,021.64
Calendar Year 1935.....	97	6,319.75	960.00	1,195.00	513.00	5,431.00	1,693.46	5,768.00
Calendar Year 1936.....	248	204,454.00	9,947.00	23,141.00	885,851.00	770,611.00	122,542.29	1,549,930.30
Calendar Year 1937.....	375	835,259.00	14,702.00	33,113.00	289,944.00	609,845.50	55,339.66	1,088,465.95
Calendar Year 1938.....	521	1,758,345.50	49,122.50	23,059.00	651,363.00	1,974,653.00	217,055.49	2,046,236.27
Calendar Year 1939.....	499	429,139.25	1,597.00	21,318.00	132,358.00	591,907.00	148,298.09	642,110.21
Calendar Year 1940.....	313	474,244.25	1,200.00	880.00	141,864.00	779,165.00	67,231.48	954,031.02
Calendar Year 1941.....	445	1,355,424.50	43,710.00	121,480.00	202,020.00	1,907,527.00	170,488.53	2,050,979.43
TOTALS.....	4,083	5,968,002.375	267,107.50	387,062.50	2,541,568.38	7,961,214.60	\$ 975,922.56	\$9,767,734.29

Timber Industry.—Lumber manufactured during the year from timber cut on provincial and school lands and on forest reserves reached the impressive total of 272,345,129 f.b.m., a very definite lumber production record. Wartime demands are of course responsible for this most noticeable increase. The demand exceeded the supply and problem of labour supply became a major one for the timber operators. A small increase in price was permitted by the Timber Controller to take care of increased living costs and to allow for a reasonable profit. Beyond this, however, ceiling prices have prevented the price of lumber from soaring to unreasonable heights. The following comparative statement will demonstrate the steady increase of production in the past few years.

LUMBER MANUFACTURED FROM TIMBER CUT ON PROVINCIAL AND
SCHOOL LANDS AND ON FOREST RESERVES

Fiscal Year	F.B.M.
1935-36	89,919,530
1936-37	104,492,420
1937-38	146,301,510
1938-39	122,450,579
1939-40	131,497,021
1940-41	185,752,504
1941-42	272,345,129
Total	1,052,758,693
Increase this year in comparison with last	86,592,625

FISHERIES

Reference has already been made to the effect that the Fisheries and Game branches were returned to this Department for administration at the beginning of the fiscal year 1941-42.

As will be noted by the opening remarks of the Fish and Game Commissioner in his section of this Report, the Fisheries Service, upon being taken over by the Department, was subjected to a careful scrutiny regarding existing policies, and an examination regarding experiences of similar administrations throughout the North American continent was made, with a view to obtaining the highest degree of efficiency for the management of this important branch of Alberta's natural resources.

Distribution of Fry.—Distribution of game fish fry (trout of all species and perch) during the year to Alberta's rivers, creeks and lakes totalled 2,006,900.

It has been found that the policy of distributing fry to angling streams throughout the province has for many reasons failed to increase the fish population in any noticeable manner.

After examining other systems, it was decided that the distribution of fingerlings, of as large a size as possible, proved to be the most successful procedure in return for money expended. On making this decision, and in consideration of costs necessary for the construction of rearing ponds, the placing of such ponds in localities where they would be most effective was given special attention.

Whitefish Hatchery.—The whitefish hatchery at Canyon Creek, Lesser Slave Lake, was remodelled during the year in connection with its power supply, resulting in Diesel plants replacing the steam ones formerly in use.

A total of 58,850,000 eyed whitefish eggs from the hatchery were planted during the year in Alberta lakes.

Commercial Fishing.—Commercial fish of all species, taken during the year, totalled 5,920,099 pounds.

TOTAL AMOUNT OF FISH TAKEN FOR COMMERCIAL PURPOSES
AND VALUATIONS

Fiscal Year	Weight (lbs.)	Value to fishermen	Value as marketed
*1930-31	1,851,848	\$ 70,624	\$ 94,032
1931-32	3,337,980	115,928	189,928
1932-33	2,655,214	94,440	130,809
1933-34	3,566,356	131,124	200,755
1934-35	4,059,436	145,190	244,071
1935-36	4,921,542	200,394	287,726
1936-37	6,029,857	252,773	385,344
1937-38	6,201,917	252,771	464,842
1938-39	7,242,746	236,851	463,457
1939-40	8,661,781	202,107	574,732
1940-41	7,285,582	206,191	442,752
1941-42	5,920,099	198,400	437,137
Totals.....	61,734,358	\$2,106,793	\$3,915,585
Decreases this year in comparison with last.....	1,365,483	\$ 7,791	\$ 5,615

The decrease, as shown above, was due principally to the closing of Lake Wabamun fishing, and the reduction in catches at Cold Lake and Lac La Biche.

SUMMARY OF CONFISCATIONS AND PROSECUTIONS CAUSED BY INFRACTIONS
OF THE FISHERIES REGULATIONS

Fiscal Year	Confiscations	Prosecutions
1937-38	188	132
1938-39	116	86
1939-40	119	134
1940-41	112	107
1941-42	59	78
Totals	594	537
Decreases this year in comparison with last.....	53	29

*Six months period.

GAME

The Game Branch, in company with that of the Fisheries, was returned to this Department for administration at the opening of the fiscal year under review.

The Game Act of 1941.—The return of game administration to the Department of Lands and Mines during this year synchronized with the appearance of The Game Act of 1941, which represented a revision of The Game Act of 1932 with amendments.

In this particular, an effort was made to simplify the meaning of the new act with a view to the general public becoming more conversant with its various clauses. Principal changes in the new legislation are dealt with in the Fish and Game Commissioner's report.

Trapping Area Registrations.—A review of trapping area registrations, conditions surrounding the supervision of game, together with general improvements effected is given in detail in the Commissioner's report.

Changes in Procedure.—Changes in the procedure of game administration were made during the year.

One was effected by securing a closer co-operation between the Fish and Game branches and that of the Forestry Service. In obtaining such assistance it was possible to secure supervision of fish and game and their respective activities by forest rangers.

In the redrafting of the new act, valuable assistance was given by the provincial Fish and Game Association, by the Zoological Department of the University of Alberta, and by fur farm organizations and fur dealers.

Other matters of direct interest to game, trapping and fur farming are discussed in detail in the Fish and Game Divisions' report.

DEPARTMENT OF LANDS AND MINES

ALBERTA FUR PRODUCTION

Season	Number of Pelts	Valuation
1930-31	941,401	\$1,118,027
1931-32	1,145,888	877,331
1932-33	1,215,094	1,074,884
1933-34	2,270,503	1,533,799
1934-35	1,850,625	1,474,530
1935-36	1,304,966	1,540,077
1936-37	2,068,118	2,170,121
1937-38	1,476,698	1,156,013
1938-39	2,273,826	1,345,130
1939-40	3,977,118	2,514,878
1940-41	2,601,424	2,806,073
1941-42	11,713,686	5,162,635
Totals	32,839,347	\$22,773,498
Increases this year in comparison with last....	9,112,262	\$ 2,356,562

Seasons shown above date from July 1st of one year to June 30th of the next. The noticeable increases appearing in 1941-42 are due to the unusual numbers of rabbit and squirrel pelts taken.

MINING LANDS ADMINISTRATION

Information dealing with quantities and valuations of Alberta's non-metallic minerals produced during the year are given in the Report of the Mining Lands Division. To this is added details covering mineral rights, solid, liquid and gaseous, revenue from fees, rentals, bonuses and royalties, reservations of areas for geological examination and acquisition of varying forms of mineral leases.

Leases dealt with.—Totals of leases issued from October 1st, 1930—date of natural resources transfer—to March 31, 1942 are shown as follows:—Leases active at date of transfer, 19,635; issued, 9,851; reinstated, 94; divided, 370; cancelled, 25,997; renewed, 334; active as at March 31st 1942, 3,619. Areas covered by same are given in a separate statement.

Coal Royalties.—The table dealing with royalties on coal, produced in former years, is shown from the fiscal years of 1907-8 to 1941-42, inclusive.

Salt.—Production of salt during the year practically doubled the total figure for 1940. Reason for this increase was due to the heavy demands for this home product, which kept the reconstructed plant at Waterways working at capacity through the year.

SALT PRODUCTION

Calendar Year	Tons	Valuation
1938	3,995	\$ 39,950
1939	3,322	33,220
1940	8,524	85,240
1941	16,610	166,100
Totals.....	32,451	\$324,510
Increases this year in comparison with last.....	8,086	\$ 80,860

NOTE: The valuation of \$10.00 per ton, which is shown, is based on a well-head price only, and has no relation to a wholesale price of the commodity, which would be considerably higher. Alberta salt development started in 1938. Prior to that year, production was insignificant and no official figures are available.

PETROLEUM AND NATURAL GAS

Number of Turner Valley Crude Oil Wells.—Dating from June 16th, 1936, when crude oil was discovered in Turner Valley's limestone, annual totals, dealing with the completions of such wells were as follows:—

Calendar Year	Number of Wells
1936	2
1937	22
1938	36
1939	34
1940	36
1941	46
Total.....	176
Increase in comparison with last year	10

PETROLEUM AND NATURAL GAS CONSERVATION BOARD

As stated on previous occasions oil production in Alberta is carried out under the supervision of the Petroleum and Natural Gas Conservation Board.

The underlying principle governing such administration is that of procuring a maximum production from producing oil areas with a minimum of injury to the fields from which it is procured. It is felt that the vigorous pursuit of such a policy will aid most effectively Alberta's contribution towards wartime economy.

In July 1941, the services of Robert E. Allen, Chairman of the Board, were loaned by special request of the United States Government to Harold L. Ickes, Co-ordinator at Washington. Following this change, J. J. Frawley, K.C., Member of the Board, officiated as Acting Chairman. Later in 1942, some months after the close of the fiscal year, Mr. Frawley was appointed to the position of Chairman of the Board and Mr. M. D. Kemp to Board Member.

Aviation Gasoline.—The processing of Alberta oil for aviation gasoline was continued throughout the year. Demands for this fuel from different parts of the province, and from points outside, became increasingly heavy with the very considerable growth of aerial activities.

Turner Valley Development.—Turner Valley's development and production of oil increased steadily through the year. With the completion of new wells in the north end and the N.W.H.B. 6 well in the south, the field, curving slightly to the northwest from its southern extremity, is now extended to a length of approximately 20 miles.

Other Alberta Fields.—Outside of Turner Valley, 8 other fields contributed in 1941 to Alberta's oil production with a total of 78,300 barrels. Vermilion was the most noticeable producer.

Discovered in 1939, oil recovered from this area—a viscous product with gravity running from 14° to 20°, A. P. I.—met in its classification the fuel oil demands of the railways.

Production depths were in the neighborhood of from 1,800 to 1,900 feet. Drilling time was consequently short, and wells in certain cases had been completed in 36 hours. Gas in some instances, is of sufficient quantity to maintain flowing wells for a short time.

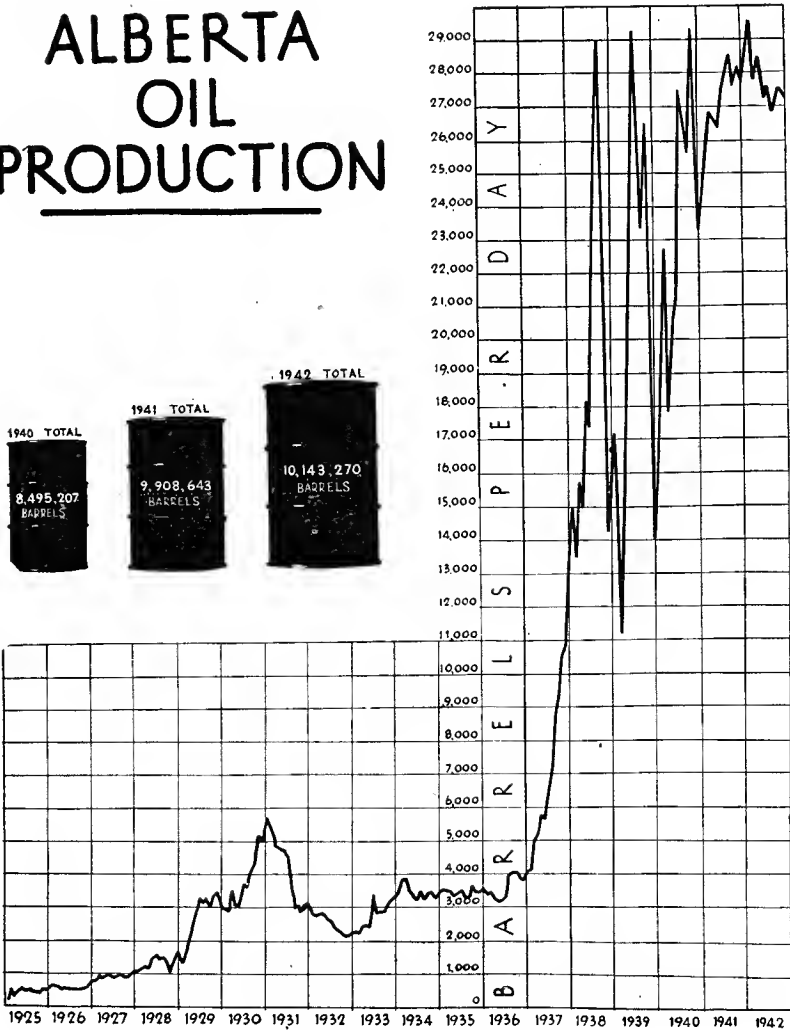
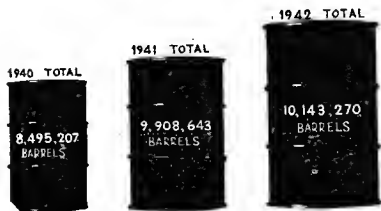
The use of this fuel in locomotives has been most favourably reported on. Without question the field gives promise of encouraging production with an established market for its products.

The total production of fields outside Turner Valley, though at present insignificant with the Valley's production, is nevertheless important, because it shows increase and promise of increase. It is important also because it demonstrates the wide-spread area of Alberta's oil.

Development of Bituminous Sands.—A disastrous fire took place at the Abasand plant near McMurray in the winter of 1941-42, which seriously delayed the important development work being carried out by the Company in that area. The plant had just finished construction, and production of crude oil, gasoline and Diesel was at last in evidence.

Reconstruction of the plant, which was considerably handicapped by such present problems as priorities of steel, etc., was completed by mid-summer of 1942, when production of oil was once again under way.

ALBERTA OIL PRODUCTION



PETROLEUM PRODUCTION IN THE BRITISH EMPIRE, 1932 TO 1942 INCLUSIVE

Country	1932		1933		1934		1935		1936	
	Barrels	Per Cent	Barrels	Per Cent	Barrels	Per Cent	Barrels	Per Cent	Barrels	Per Cent
Trinidad	10,126,121	43.1	9,561,353	41.2	10,894,363	41.2	11,671,224	40.7	13,237,030	39.2
Canada	1,044,412	4.4	1,145,333	4.8	1,401,895	5.3	1,447,204	5.0	1,504,287	4.5
Bahrain Island	902	...	31,377	0.1	185,072	1.1	1,264,807	4.4	4,644,735	13.7
Burma	7,073,437	30.1	7,114,311	30.0	7,278,859	27.5	7,181,113	25.1	7,587,718	22.5
Brunei	1,200,026	5.1	2,035,656	8.6	2,705,350	10.2	3,302,905	11.5	3,296,938	9.7
India	1,743,878	7.4	1,628,803	6.9	1,921,863	7.3	2,037,810	7.1	1,978,329	5.8
Sarawak	2,329,733	9.9	2,206,815	9.3	1,942,591	7.4	1,776,593	6.2	1,547,882	4.6
Total British Empire	23,518,509	100.0	23,723,648	100.0	26,429,993	100.0	28,681,656	100.0	33,796,819	100.0
World Total	1,306,714,101	...	1,438,767,449	...	1,517,121,671	...	1,651,993,118	...	1,797,993,578	...
Per Cent, British Empire of World	1.80	...	1.65	...	1.74	...	1.74	...	1.88	...

Country	1937		1938		1939		1940		1941		1942*	
	Barrels	Per Cent	Barrels	Per Cent	Barrels	Per Cent	Barrels	Per Cent	Barrels	Per Cent	Barrels	Per Cent
Trinidad	15,502,989	36.8	17,737,060	35.5	19,270,000	37.7	20,300,000	38.2	21,150,000	38.5	27,375,000	54.1
Canada	2,943,750	7.1	6,956,811	14.0	7,843,780	15.2	8,723,982	16.5	10,123,904	18.4	10,403,354†	20.5
Bahrain Island	7,762,264	18.4	8,298,000	16.7	7,588,560	14.8	7,200,000	13.5	7,070,000	12.9	7,800,000	15.4
Burma	7,847,553	18.5	7,499,500	15.0	7,396,000	14.4	7,750,000	14.6	7,900,000	14.3	2,500,000	5.0
Brunei	4,397,038	10.5	5,387,210	10.8	5,755,000	11.1	5,742,000	10.7	5,245,000	9.6	...	...
India	2,161,653	4.9	2,330,200	4.7	2,164,000	4.2	2,150,000	4.1	2,245,000	4.0	2,500,000	5.0
Sarawak	1,655,565	3.8	1,624,880	3.3	1,327,000	2.6	1,321,000	2.4	1,275,000	2.3	...	...
Total British Empire	42,270,812	100.0	49,833,661	100.0	51,344,340	100.0	53,186,982	100.0	55,008,904	100.0	50,578,354	100.0
World Total	2,046,650,389	...	1,979,268,510	...	2,068,667,520	...	2,158,123,000	...	2,227,125,000	...	2,056,900,000	...
Per Cent, British Empire of World	2.06	...	2.51	...	2.48	...	2.46	...	2.46	...	2.45	...

*Preliminary figures.

†In the total of 10,403,354 barrels shown in this table for Canada in 1942, 10,143,270 barrels or 97.49 per cent were produced in Alberta.

‡During the brief period, early in 1942 before the scorched earth policy was put into effect in Borneo, there was some oil production in both Brunei and Sarawak, but the totals are unknown.

Production figures reported on for 1941 were given as follows:

Oil Sand Mined (tons)	21,731
Crude Oil produced (barrels)	19,519
Gasoline (barrels)	1,142
Diesel and burner oil (barrels)	4,190

ALBERTA OIL PRODUCTION BY FISCAL YEARS

Period	Barrels
1914 to close of fiscal year, 1928-29	1,453,404
Fiscal Year 1929-30	1,135,014
1930-31	1,614,202
1931-32	1,246,328
1932-33	871,082
1933-34	1,141,473
1934-35	1,246,958
1935-36	1,249,596
1936-37	1,447,661
1937-38	3,680,099
1938-39	6,651,068
1939-40	8,039,279
1940-41	9,170,931
1941-42	10,167,836
Total	49,114,931
Increase this year in comparison with last	996,905

ALBERTA OIL PRODUCTION BY CALENDAR YEARS

Calendar Year	Barrels	Calendar Year	Barrels
1914 to 1924	96,504	1934	1,265,940
1925	168,643	1935	1,263,750
1926	219,598	1936	1,320,442
1927	332,133	1937	2,796,908
1928	489,531	1938	6,742,039
1929	999,152	1939	7,594,411
1930	1,433,844	1940	8,495,207
1931	1,455,195	1941	9,908,643
1932	917,622		
1933	1,013,040	Total	46,512,602
Increase this year in comparison with last			1,413,436

NATURAL GAS CONSUMPTION

Fiscal Year	Mcf.
1940-41	26,744,271
1941-42	29,485,571

British Empire Production.—Canada in 1941 took 12th place amongst the 25 oil producing countries of the world, and 2nd place amongst the 7 production areas of the British Empire, producing 18.3 per cent of the Empire's total. In the matter of increased production within the Empire, Canada took 1st place with an increase of 1,377,661 barrels.

Percentages of interest regarding 1941 oil production are given as follows:

British Empire of World	2.47 per cent
Canada of British Empire	18.43 per cent
Alberta of Canada	98.08 per cent
Turner Valley of Alberta	99.20 per cent

COAL

Still another record year in coal production was reported for Alberta by the end of the calendar year 1941, when the total reached 6,970,064 tons, with a valuation of \$19,337,420, showing an increase of 764,976 tons over 1940. An additional 227 tons were produced by farmers under permit for their own use during the year. This figure is not included in the total output already given.

As reported last year, the increased production is due to railway fuel requirements, shipments to different parts of the Dominion, especially to Ontario, and to increased domestic demands.

In last year's report a production and valuation table was produced showing annual Alberta coal totals from 1886 to date. The production table which follows shows totals from the date of transfer of the natural resources to 1941.

Total production of Alberta coal from 1886 to 1941, inclusive, is 180,975,732 tons, with a valuation of \$555,772,936.

Calendar Year	Tonnage	Valuation	Calendar Year	Tonnage	Valuation
1930	5,755,911	\$ 19,379,000	1936	5,696,375	\$ 14,720,004
1931	4,564,290	13,415,745	1937	5,551,682	14,434,970
1932	4,870,030	13,441,193	1938	5,230,025	13,702,983
1933	4,714,784	12,197,339	1939	5,518,105	14,454,328
1934	4,748,848	12,440,617	1940	6,205,088	16,334,323
1935	5,462,973	13,946,338	1941	6,970,064	19,337,420
TOTALS				65,288,175	\$177,804,260
Increase this year in comparison with last				764,976	\$ 3,003,097

Disposition of Alberta Coal in 1941.—Coal sold for consumption in Alberta totalled 1,335,606 tons; sold for consumption in other provinces of Canada, 2,023,110 tons; sold to the United States, 32,742 tons; sold to railway companies, 3,090,290 tons; used in making briquettes, 117,986 tons; used in making coke, 105,390 tons; used under colliery boilers, 137,739 tons; used by colliery railways, 7,523 tons; put to stock, 54,436 tons and put to waste 10,973 tons. These tonnages include coal lifted from stock and waste heaps, a figure which is not included in the yearly production total already given.

PRODUCTION OF COKE AND BRIQUETTES

Calendar Year	Coke (Tons)	Briquettes (Tons)
1930		24,111
1931		15,102
1932	2,183	13,582
1933	49,279	16,104
1934	59,703	15,906
1935	63,428	18,812
1936	65,239	21,015
1937	65,967	27,044
1938	68,692	39,239
1939	68,913	46,510
1940	70,753	66,127
1941	70,354	126,188
TOTALS	584,511	429,740
Increases and decreases in comparison with last year....	—399	+60,061

Disposition of Electrical Power for Alberta Coal-mines in 1941.—Purchased electrical power used by Alberta coal-mines during the calendar year 1941, totalled 35,973,384 k.w. hours.

ELECTRICAL POWER USED FOR OPERATION OF ALBERTA COAL-MINES

Calendar Year	K.w.hrs.
1930	25,003,606
1931	16,918,625
1932	14,875,890
1933	17,611,959
1934	19,447,621
1935	23,111,373
1936	24,912,243
1937	25,483,749
1938	24,611,920
1939	27,375,926
1940	31,660,119
1941	35,973,384
TOTAL	287,186,415
Increase this year in comparison with last	4,313,265

SHALE AND CLAY MINED

During the calendar year 1941 five shale pits were in operation. Production from same totalled 44,109 tons of shale and clay from which 13,593,050 bricks and 8,080 tons of hollow tile were made.

Calendar Year	Shale Mined (Tons)	Bricks Manufactured (Number)	Tiles Manufactured (Tons)
1930	67,517	22,007,045	.....
1931	23,855	7,091,080	2,825
1932	8,446	3,444,010	182
1933	3,234	1,221,060	.....
1934	13,561	4,398,032	1,171
1935	20,258	7,349,300	.....
1936	24,588	8,963,384	.....
1937	27,144	9,946,794	252
1938	19,929	7,609,314	1,640
1939	27,236	8,194,685	2,649
1940	35,614	9,885,326	5,712
1941	44,109	13,593,050	8,080
TOTALS	315,491	103,703,080	22,511
Increases this year in comparison with last	8,495	3,707,724	2,368

Mines Branch Annual Report.—Statistical information covering Alberta's coal-mining activities and production of shale and clay mined for the calendar year 1941 is given in complete detail in the published Annual Report of the Mines Branch, Department of Lands and Mines, for this period, which appears as a separate publication to this report.

TECHNICAL DIVISION

Issue of Notifications (Land Patents).—The following comparative statement shows the number of notifications and acreage covered thereby for the fiscal years from 1930-31 to 1941-42, inclusive:—

NOTIFICATIONS ISSUED

Fiscal Year	Number of Notifications	Area, Acres
1930-31	23	3,019,710
1931-32	784	111,424,478
1932-33	1,260	178,887,233
1933-34	1,106	165,224,553
1934-35	2,006	324,611,398
1935-36	2,965	433,529,126
1936-37	2,231	325,615,379
1937-38	2,266	382,382,437
1938-39	2,874	517,435,896
1939-40	2,097	301,431,972
1940-41	2,058	295,649,119
1941-42	1,563	229,566,606
TOTALS	21,233	3,268,777,907
Decreases this year in comparison with last	495	66,082,513

Special Area Map.—Included in the Technical Division's report, in addition to the usual chart showing total area of lands patented, is a map which gives the present disposition of the former Tilley East Special Area.

The selection by the Dominion Government of about 30 townships of land in the Tilley East district, just north of Medicine Hat, for a bombing area, is dealt with in detail by the Technical Division. The area, thus chosen, is now known as the British Block.

The transaction, of course, involved the removal of all residents from the district, and their settlement elsewhere, which necessitated a considerable amount of organization work demanding detailed application to individual cases.

New Surveys.—Reference to new surveys carried out during the year are given, with explanation as to the circumstances of each case.

Mineral Taxation.—The placing of the Mineral Taxation Act of 1941 under the administration of the Technical Division was effected during the year, and methods in relationship to procedure are discussed.

Preservation of Records on Film.—The service which it is possible to secure by the preservation of records on film, and the tremendous saving in storage

space as a result of such operations are shown. Legislation having authorized the filming of documents by this process, a Recordak Junior has been installed in the office of the Division for the purpose of carrying out this work.

Photostat Machine.—The operations of this machine through the year reached a considerable total, both for this and for other departments. The service given is of great value, not only because it is a time saver, but also because of its facility for turning out documents to any size required.

New Maps.—New maps issued during the year included one of the Province of Alberta, which was published in October, 1941. It is drawn to a scale of 16 miles to the inch. Details covering surveyed areas, cities, towns, villages, post offices, railways, highways, etc., are given. A new strip map of Turner Valley, and also one of the area immediately north, were also published.

Detailed information covering other activities of the Division, carried out during the year, are dealt with in its report.

RADIO COMMUNICATION SERVICE

In last year's Report emphasis was laid upon both the vital importance, and advancement made, regarding the radio communication service in its relationship to detection and suppression of forest fires in Alberta.

At the start of the year under review there were nine look-out stations in different parts of the province. A new one was constructed and came into operation about August 19, 1941 at Goose Mountain in section 32, township 66, range 14, west of the 5th meridian. These towers are equipped with standard radio equipment which were all in operation.

During this season all cars operated by timber inspectors were equipped with two-way radios. Including the Radio Superintendent's set, radio-equipped cars in use by the Forest Service at this time totalled sixteen. Results obtained by the operation of these mobile units were successful and encouraging. Mileage was reduced due to the fact that inspectors, in the course of their duties, were no longer compelled to return to their headquarters to receive requests for inspections.

The servicing of all portable equipment was attended to prior to the opening of the fire season. Fifty-seven portable sets were in operation in various parts of the province.

Enlargement of the Edmonton radio station became necessary during the year to take care of additions to staff and equipment. Larger scale maps covering only an area serviced by two or three towers were introduced for purposes of increased efficiency and accuracy in spotting exact locations of fires.

The purchase of supplies and equipment in these days of priorities becomes an ever increasing problem. The question of radio personnel is another one, as evidenced by the fact that over sixty per cent of this staff was new to the Forest Service at the start of the fire season. In spite of these considerations the equipment functioned most satisfactorily through the year, and maintenance and repair costs were low.

STAFF

As expected, questions raised by the continual changes of staff and loss of experienced personnel leaving for Active Service were once more experienced throughout the year. This situation, without a doubt, will remain unchanged for some considerable time as a natural outcome of war, and particularly such a war as this.

The general question of administration under such conditions naturally presents many problems which must be solved. The work of the Department, under these new and perplexing difficulties, may quite justifiably be described as service on the home front.

To carry out, efficiently and well, the various activities related to public affairs, in spite of whatever obstacles have arisen, or may continue to arise, resolves itself into an individual and important duty for every member of the Department.

As civil servants we are the custodians of this great province. We are responsible for its protection today—and its preservation for tomorrow—in spite of every handicap the times may lay upon us. To those of us who cannot serve elsewhere, there is a service here in contributing now, through our work in this Department, to the great question of rehabilitation. Such contribution, well carried out, may definitely be classified as a war effort of real importance.

That this has been realized is apparent by the service which the staff of this Department has given under these difficult circumstances during the year, in return for which I would like once again to express my appreciation.

Individual detailed reports from the various Divisions of the Department follow.

Your obedient servant,

J. HARVIE,
Deputy Minister.

Edmonton, January 22, 1943.

Active Service Enlistments

REPORT OF THE STATISTICIAN, J. L. IRWIN

Conditions of war on an ever-increasing and world-wide scale were evidenced during the year under review. Towards its close, the treacherous incident of Pearl Harbour not only brought the United States into the conflict, but also set ablaze the vast areas of the Pacific and Far East.

It was a tragedy which came close to home. Canada immediately entered the war zone, with an emphasis being laid, to an almost alarming extent, on her responsibility for increased production of natural resources, urgently needed as tools of war. Into this new picture, the agricultural and industrial areas of Alberta were quickly introduced.

During the year, enlistments for Active Service on the part of members of the departmental staff continued. Conditions covering such procedure, as stated last year, should perhaps be repeated. Enlistments for Active Service have, of course, been taking place in the departmental staff since the war began.

Civil servants who are on the permanent list are given indefinite leave of absence until the end of the war, or until they are discharged from whatever Branch of the Service with which they have been engaged, when they become entitled to re-employment in the same capacity as, or similar capacity to, that which existed prior to their enlistment.

Towards the close of 1942, enlistments in the Department had climbed to a total of sixty. Seven of this number were ladies, four having been taken on the strength of the Canadian Women's Army Corps, and three on that of the Women's Division of the R.C.A.F. The new list is as follows:

<i>Name</i>	<i>Date of Enlistment</i>	<i>Branch of Service</i>
Adin, R. G.	June 30, 1941	R.C.A.F.
Alexander, J. P.	July 1, 1940	R.C.A.F.
Anderson, C. G.	June 30, 1941	R.C.A.F.
Arcand, Romeo	July 1, 1940	R.C.A.F.
Barber, J. D.	January 8, 1942	R.C.A.F.
Barnard, E. D.	September 20, 1939	Royal Canadian Signallers
Baxter, R. D.	November 13, 1939	8th Field Ambulance, R.C.A.M.C.
Bennett, H. E.	May 16, 1942	R.C.A.F.
Bowen, R. L.	June 25, 1940	Calgary Highlanders
Brennan, W. R.	August 30, 1941	R.C.A.F.
Brent, Miss Pearl M.	October 28, 1941	C.W.A.C.
Brick, H. A.	May 31, 1941	R.C.A.F.
Browne, O.	October 25, 1939	Edmonton Regiment
Bryant, H. J. P.	February 1, 1941	Canadian Provost Corps
Campbell, J. G.	July 5, 1942	Edmonton Fusiliers, 3rd Battalion
Cragg, W. E.	October 10, 1941	Anti-Tank Battery
Craig, Ace	May 6, 1940	Royal Canadian Navy
Craig, Miss H. M.	June 2, 1942	Women's Division, R.C.A.F.
Dalphon, M. H.	June 22, 1940	R.C.A.F.
Fraser, C. M.	September 22, 1941	R.C.A.F.
Gauthier, L. P.	February 15, 1941	R.C.A.F.
Hereford, W. E.	August 18, 1941	R.C.A.F.
Hinman, G. W.	June 30, 1942	R.C.A.F.
Hutchison, J. A.	October 27, 1939	R.C.A.F.
Keats, F. J.	April 22, 1940	R.C.A.F.
Krause, R. F.	September 19, 1939	61st Battery, R.C.A.
Langford, E.	October 13, 1942	Basic Training Centre
Lashbrook, C. S. H.	April 22, 1942	R.C.A.F.
Lavoie, A. J.	June 1, 1940	South Alberta Regiment
Longson, Burgess	July 29, 1940	4th Petrol, R.C.A.S.C.
Macomber, Ralph	August 16, 1941	R.C.A.F.
Magneison, J. A.	May 28, 1941	R.C.A.F.
Maneluk, Miss L.	June 2, 1942	Women's Division, R.C.A.F.
Marr, F. B.	August 30, 1940	R.C.N.V.R.
Maynard, G. F.	April 11, 1942	R.C.A.F.
Miller, Miss E. M.	September 27, 1941	C.W.A.C.
McCardell, W. H.	March 13, 1940	R.C.A.F.
McKee, R. M.	January 3, 1942	R.C.A.F.

McKinnon, I. W.	May 2, 1940	R.C.A.F.
Newsome, R. T.	September 21, 1940	Royal Canadian Navy
Patrick, J. W.	March 7, 1942	R.C.A.F.
Peart, A.	September 2, 1939	Edmonton Regiment
Pinkerton, H.	December 11, 1941	R.C.A.F.
Raymond, W.	November 9, 1941	R.C.A.F.
Rees, D. B.	November 23, 1940	R.C.A.F.
Robertson, E. R.	May 7, 1941	Anti-Tank Battery
Russell, Miss I. A.	September 16, 1941	C.W.A.C.
Scott, C. W.	May 12, 1942	R.C.A.F.
Shaver, E. P.	January 31, 1940	Royal Canadian Navy
Shillabeer, W. E.	October 31, 1939	Royal Canadian Navy
Sloan, G.	May 28, 1941	R.C.A.F.
Smith, Miss E. V.	March 16, 1942	C.W.A.C.
Sparrow, F. D.	July 28, 1941	R.C.A.F.
Steffin, P. N.	May 16, 1942	R.C.A.F.
Strate, L. D.	May 20, 1941	R.C.A.S.C.
Sturrock, E. N.	January 18, 1942	R.C.A.S.C.
Waikle, L. L.	February 10, 1942	Veterans Guard of Canada
Walker, D. R.	August 15, 1940	R.C.A.F.
Wedenkamp, Miss M.L.	July 11, 1942	Women's Division, R.C.A.F.
Young, D. J.	September 7, 1940	R.C.A.F.

Mention was made in last year's Report of the noticeable advancement which Wing Commander J. A. Hutchison and Lieutenant Commander E. P. Shaver, both of this Department, had achieved in their respective services.

Additional distinction has now come to Wing Commander Hutchison by the appearance of his name in the New Year's Honours List as a recipient of the O.B.E. The award, it is understood, was made as a result of extremely valuable service having been given in his administrative duties as Commanding Officer of No. 4 Initial Training School, R.C.A.F., in Edmonton. On March 3, 1943, he was again promoted, this time to rank of Group Captain. Shortly after this announcement was made, Group Captain J. A. Hutchison, O.B.E. was reported as having arrived overseas to take command of an operational unit.

The advancement of J. P. Alexander of this Department, who enlisted in the R.C.A.F. on July 1, 1940, should also be recorded. Mr. Alexander, on entering the Service, was given a commission with rank of Flying Officer. Promotions have followed and he is now a Squadron Leader.

Mention was also made in the last Report regarding the splendid record of Flight Lieutenant D. S. Florence, D.F.C., the official citation covering his decoration having been given. Flight Lieutenant Florence, though not a member of the Department staff at the time of his enlistment, had, nevertheless, been a member for a period of years at an earlier date.

Lieutenant F. B. Marr, R.C.N.V.R., whose name appears on the Department's Active Service List, was reported on March 13, 1943, to have been one of the officers of the Canadian Corvette, H.M.C.S. Regina, when she engaged and sank an Italian submarine in the Mediterranean—the third enemy U-boat sunk by the Canadian Navy in those waters within recent months. The Regina captured over twenty members of the submarine's crew. Following this encounter, Lieutenant Marr returned to Canada and arrived in Edmonton on leave.

The sad news covering D. J. Young and J. G. Rogers, formerly members of this Department and later of the R.C.A.F., was given in the last Annual Report.

The official report from the Royal Canadian Air Force, relative to these two, reads as follows:—

"R61155 Sergeant D. J. Young lost his life on July 22nd, 1941, during flying operations near Mountain View, Ontario.

Pilot Officer J. G. Rogers (J15013) was reported missing after air operations on August 20th, 1941. His death has been presumed for official purposes as having occurred on that date."

This casualty list is now most regrettably added to by the name of F. W. G. Faunt, who resigned from the Department on June 14th, 1939, and later joined the R.C.A.F.

The official R.C.A.F. statement relative to this former member of the Department is given as follows:

"Pilot Officer F. W. G. Faunt (J8944) lost his life during air operations near Tunbridge Wells, Kent, England, on May 25th, 1942. He enlisted in the Royal Canadian Air Force on February 24th, 1941."

With reference to the report last year that Sergeant M. H. Dalphond, R.C.A.F., was officially reported missing on July 24, 1941, after air operations over enemy territory, and the later official report that he was interned in Vichy, France, and was known to be safe and well, further information may now be given.

It appears that Sergeant Dalphond made no less than three escapes from internment camps in France. The first two ended in his recapture, but the third was a success. By disguising himself as a peasant, he managed by bicycle and on foot, mostly on foot, to cross the Pyrenean frontier into Spain and eventually to arrive at Gibraltar. By the end of October, 1942, he was back in Edmonton.

This courageous and dramatic adventure followed his bailing out of a crippled bomber over France at a height of 15,000 feet. Pulling the rip cord of his parachute he discovered that nothing happened. By dragging out some of the silk he managed at 8,000 feet to release enough so that the wind could catch it and landed safely, though wounded with a bullet in his back. The remainder of the crippled bomber crew were not so fortunate. Two were reported killed and the others presumably were captured. A later report stated that one of them, a Wing Commander, subsequently escaped.

On February 6th, 1943, an official announcement was published from London to the effect that the Distinguished Flying Medal had been awarded to Sergeant Airgunner Melville H. Dalphond, of Morinville and Edmonton, for "gallantry and determination." This official recognition of the service he has given for his country is a very high honour, of which, amongst others, the Department has every reason to be proud.

The list of sixty strong will unquestionably be added to from time to time. Whilst the news from the various fronts has changed definitely for the better, it is well to remember that no man can say how long the war may yet go on.

The favourable news means a change for the United Nations at last—from the defensive to the offensive. An offensive, however, brings heavy casualties, and casualties demand reinforcements—in ever increasing numbers. The reserves will be called upon to supply them, following which, the history of the last war may be repeated, and some of the restrictions, which to so many have up to now stood in the way of enlistment, may be drastically removed. Should this materialize, and it may quite easily do so, it will mean a new drain on the ranks of industry, labour and staffs of governments. It is an eventuality which, because it may happen, should be anticipated.

To the former civil servants of this Department, now serving their country on land, sea and in the air, the sincerest wishes of their old friends in the Department are extended for their preservation, and for their safe return.

Provincial and School Lands Administration

REPORT OF THE DIRECTOR OF LANDS, V. A. WOOD

PROVINCIAL LANDS

The Federal Government's crop curtailment policy was continued during the year under review, and this Department again co-operated to the fullest extent by not accepting applications for cultivation leases except in cases where at least one-third of the total area had already been broken.

The Department was entitled to, and made application for, participation in the crop reduction bonus for all leases issued on provincial and school lands, and received a total payment for the same up to the end of the fiscal year amounting to \$14,476.10.

In central and northern Alberta, and particularly in the Peace River district, the grades of grain suffered considerably due to continued rain and cold weather between cutting and threshing. The average wheat yield for the province was 14 bushels per acre, 2 bushels per acre less than the previous ten year average. The wheat production for Alberta was approximately 25% less than the previous ten years.

The quota system of wheat deliveries was again in effect, but was much more satisfactory than last year. The quota raised rapidly and was finally removed altogether on December 2nd.

The Canadian Wheat Board remained in operation with a pegged price of 70c per bushel for wheat, basis No. 1 Northern at Fort William.

During the fiscal year the preparing of leases and other documents for provincial lands within the Special Areas, also the collection of payments and crop shares, became a function of the Lands Division. The transactions carried out by this Division for the Special Areas are not enumerated in this report, but will be included, however, in future reports.

In order to assist settlers, the agricultural lease regulations were amended whereby a husband and wife, each having obtained an agricultural lease separated by a distance not greater than three miles, may complete the residence requirements by having their permanent residence on either of the agricultural leases.

On the first of April the collection of registration fees in connection with notifications for title became a function of this Division. The registration fee is remitted to the Registrar, Land Titles Office, with a letter of notification.

Land agencies were maintained at Calgary and Peace River. The Lethbridge agency was discontinued and a sub-agency was opened instead. Sub-agencies were also maintained at Bonnyville, Lac La Biche, Athabaska, Hines Creek and Grande Prairie. The Medicine Hat sub-agency was discontinued.

The following is a summary of the work performed by the field inspection staff:—

Requests for inspections outstanding as at April 1, 1941	804
Reports called for from April 1, 1941 to March 31, 1942	2,040
Reports received from April 1, 1941 to March 31, 1942	2,084
Reports outstanding, March 31, 1942	760

This work was carried on by 7 field inspectors.

The total revenue received for the fiscal year in connection with the administration of provincial lands amounted to \$145,981.43, as compared with \$125,544.35 during the previous year, showing an increase of \$20,437.08.

Details pertaining to this revenue may be found in the Accounting Division's section of this Report.

The filing systems of the different branches of the Department were amalgamated during the year, through which all letters addressed to the Department were received, and from which all outgoing letters were dispatched. During the fiscal year 156,664 letters were received, and 225,301 letters were dispatched. 3,464 new files were made, bringing the total number of files in use up to 155,699.

The stencil cutting was transferred to the Technical Division during the fiscal year and the translations for other Departments were discontinued.

The following statement will give some idea of the transactions of this Division during the fiscal year:—

Entries cancelled	794
Applications for patent received	1,452
Notifications for title issued	1,369
Applications for patent on hand as at March 31, 1941	1,893
Sales granted	79
Agricultural leases in operation as at March 31, 1941	223
Applications received	280
Leases issued	200
Leases cancelled	134
Active leases as at March 31, 1942	289

During the year 265 soil reports were called for, and 243 were received, leaving a balance outstanding of 133 as at March 31, 1942.

Assignments registered	122
<i>Provincial Lands Cultivation and Grazing Leases:</i>	
Leases in force as at March 21, 1941	422
Leases issued during fiscal year	63
Renewal six year leases issued	40
Leases transferred from Tilley East Area	34
	<hr/>
Leases cancelled during fiscal year	559
	<hr/>
Leases in force as at March 31, 1942	462
<i>Accrued Area Leases:</i>	
Leases in force as at March 31, 1941	414
Leases issued during fiscal year	68
Leases reinstated	2
	<hr/>
Leases cancelled	484
	<hr/>
Leases in force as at March 31, 1942	447
<i>Mineral Surface Leases:</i>	
Leases in force to end of March, 1941	19
Leases issued during fiscal year	2
	<hr/>
Leases cancelled during fiscal year	21
	<hr/>
Leases in force as at March 31, 1942	17
<i>Fur Farming Leases:</i>	
Leases in force as at March 31, 1941	9
Leases issued during fiscal year	2
	<hr/>
Leases cancelled during fiscal year	11
	<hr/>
Leases in force as at March 31, 1942	9
<i>Townsite Leases:</i>	
Leases in force as at March 31, 1941	15
Leases issued during fiscal year	0
	<hr/>
Leases cancelled during fiscal year	15
	<hr/>
Leases in force as at March 31, 1942	14
<i>Licences of Occupation:</i>	
Leases in force as at March 31, 1941	92
Leases issued during fiscal year	15
	<hr/>
	107

Leases cancelled during fiscal years	6
Leases in force as at March 31, 1942	101
<i>Miscellaneous Leases:</i> (Recreational, Irrigation Schemes, Church Sites, Exhibition Sites, Wharf Sites, etc.):	
Leases in force as at March 31, 1941	101
Leases issued during fiscal year	10
	111
Leases cancelled during fiscal year	5
Leases in force as at March 31, 1942	106
Grazing permits issued	1,398
Cultivation permits issued	60
Hay permits issued	1,183
Tons of hay cut	8,600
Hay seizures (2½ tons)	2

The following statement gives the particulars concerning transactions in connection with long term grazing leases:

	Number	Acreage
Leases in existence, April 1, 1941	1,433	1,996,034.85
Leases issued	141	344,399.10
Leases cancelled	91	266,115.02
Leases reinstated	8	3,672.34
Leases transferred to Tilley East Area	154	294,046.10
Area added to existing leases		892.04
Area withdrawn from existing leases		14,541.56

On March 31, 1942, there were in existence 1,645 long term leases, comprising an area of 2,358,387.85 acres.

SUMMARY

	Number	Area
Dominion Leases	608	810,400.26
Provincial Leases	1,037	1,547,987.59

SCHOOL LANDS

Order in Council, No. 436-37, appointing a Board to inquire into applications for compromise or adjustments in connection with the outstanding school lands' sales, was rescinded and a new Board was appointed under Order in Council No. 1772-41 on December 10, 1941, consisting of Mr. V. A. Wood, Director of Lands, Mr. J. W. Patrick, Acting Accountant and Mr. David Nicol, Clerk, Department of Lands and Mines.

June 30th was set as a shut-off date for application for the reinstatement of school lands' sales, cancelled between September 30, 1930 and December 31, 1936. In view of the fact, however, that some purchasers had not been notified, all parties eligible for reinstatement were notified and given a period of sixty days to make application for reinstatement.

A total of 394 applications for reinstatement of school lands' sales was received during the fiscal year. Two parties withdrew their applications. Six sales were reinstated. A total of 150 has been found ineligible for reinstatement, and the remainder have not as yet been dealt with.

Five Board meetings were held during the fiscal year and 40 cases were dealt with, in connection with which reductions were made as follows: Principal, \$114,773.57; Interest, \$95,616.72.

This makes a grand total of 2,399 cases dealt with to the end of the fiscal year, resulting in a total reduction being granted in the sum of \$2,745,597.87 on account of principal, and \$2,246,124.27 on account of interest.

There were 3 public auction sales of school lands during the year. At these sales, 845.3 acres were sold at a total price of \$5,821.17. A total of 84 sales was cancelled during the year, 29 by order in council and 55 by deeds of surrender. There were approximately 1,800 active school lands' sales as at March 31, 1942.

The total revenue collected from school lands was \$495,931.13, as compared with \$414,584.20 for the previous year, being an increase of \$81,346.93. Of

the total amount collected, \$226,747.10 was paid on account of principal and interest as compared with \$147,364.55 for the previous year, being an increase of \$79,382.55. A total of \$269,184.03 was collected from rentals, royalties, etc., as compared with \$267,271.14 for the previous year, an increase of \$1,912.89. The increase in revenue over the previous year is to some extent due to the wheat acreage reduction bonus paid to farmers, and to the increased retail prices of livestock and grain.

Cultivation and Grazing Leases:

Number of leases active as at March 31, 1941	1,655
Ten year cultivation and grazing leases issued	333
Area—62,898.24 acres	
Six year cultivation and grazing leases issued	21
Area—3,864 acres	
Number of cultivation and grazing leases cancelled	79
Area—14,921.76 acres	
Number of leases active as at the end of the fiscal year	1,930
School lands' assignments registered	76
School lands' grazing permits issued	2,072
Cultivation permits	35
Hay permits	304
Number of tons of hay cut	2,550
Hay seizures, 3—consisting of 19 tons.	

In the interests of centralization, the school lands' timber was transferred to the Forestry Division.

Forestry

REPORT OF THE DIRECTOR OF FORESTRY, T. F. BLEFGEN

From the time war was declared in 1939, there has been a growing increase in the demand for shipments of lumber from the Dominion for building purposes overseas to restore havoc wrought by the bombing of Britain. Demands for lumber to crate implements of war and for use as containers for munitions and parts of planes, tanks, etc., have also been persistently increasing. The demand is especially for spruce. The texture of this wood lends itself very well for these purposes, especially for crating and containers for war materials to be shipped overseas from different parts of Canada and the United States. As a result the need for spruce lumber has been constantly on the increase.

In addition to this demand the call for products of the forest required for the building of barracks and military encampments, together with the erection of internment camps for the sheltering of many thousand of prisoners of war, has been very heavy.

The noticeable increase in passenger travel, the continual transportation of troops and the tremendous increase in freight which the railways have been called upon to handle have made for unprecedented expenditures in the maintenance of the Dominion's railways.

This all time peak traffic load has reflected in much larger requirements for cross ties. As more coal is required by the railways to move this heavy traffic, the demand for mine props and lower grade lumber for coal doors has also been very much increased.

Conditions directly attributable to the Dominion's war effort, therefore, have placed very heavy demands on the forest resources of the country.

The harvesting of the forest crop of Alberta has increased by nearly three hundred per cent over peacetime requirements. This increase would be even greater if it were not for the shortage of experienced woodsmen. The demand for material as it exists cannot be met owing to the shortage of labour. This shortage of experienced woodsmen has been brought about by enlistments and the drafting of men for the armed forces, and also by the migration of a considerable number of men, who usually earn their livelihood in the forests and saw-mills, to industrial areas, where jobs in war plants and other related work have proved more attractive, the inducement being higher wages and more steady employment.

It is realized by those conversant with the forest resources of this province that the present rate of depletion cannot be continued indefinitely, or even for a great number of years. With victory as the sole present objective, however, no restriction in the cutting of timber can as yet be made.

The great demand for forest products and the high price being paid have attracted a number of inexperienced would-be timber operators to the business. The majority of these seem to think that all they require is a small amount of capital and willingness to work in order to make a success of the venture, and reap great profits. They do not seem to consider that lack of experience, lack of ability to handle men, to lay out roads, to fell their timber and to take it to the mill to the best advantage are handicaps to success, nor that economical management is a paramount requisite for such success. The lack of these requisites, commonly known as experience, far out-weigh their one asset in willingness to work.

The great number of applications from inexperienced operators has increased the work of the Department tremendously, as great difficulty is encountered in securing the required records, in the restriction of operations to areas allotted and to the enforcement of the timber regulations generally.

In the face of this definite increased demand for products of the forest, and the great difficulty in assisting inexperienced operators in starting, the majority of the Forestry staff have put forth Herculean efforts in keeping up their work as well as possible, and are to be heartily commended as a result. They are to be especially commended in such times as these when every hand is urgently required to help with the view to achieving the desired result of keeping this country free of Europe's tyrants, who are endeavouring to set back civilization by hundreds of years and bring about slavery.

The part the forest resources of the province is playing in the march toward victory can be readily seen. It is admittedly very difficult for legislators to look into the distant future. They have had ample opportunity, however, to obtain a proper appraisal of the value of Alberta's forests, not only for their watershed protection and tempering of the winds and climate, but also for their value in assisting to maintain the many demands of the Empire's main granary, as well as its chief arsenal.

In order to continue to meet these demands and to provide for rehabilitation after the war, a long distance view of the province's forest resources must be taken, and more assistance and equipment must be provided in order to preserve these resources, which are so vital to the country's industrial welfare.

FOREST PROTECTION

In previous annual reports emphasis has been laid on the increasing fire hazard in the northern part of the province due to the extension of settlement and also due to the fact that the staff in this huge area is extremely small. It is by no means in keeping with the resources which exist therein, and the area each ranger is forced to cover is far greater than it is humanly possible for one man to accomplish and at the same time give to the forest areas the protection so badly needed.

During the year under review the ranger staff remained approximately the same as that of the previous year. Fortunately the fire hazard in most districts was not as great during the summer of 1941 as in the previous summer, owing to occasional showers and some heavy rains at opportune times. In the Peace River, Grande Prairie and Fort Vermilion districts the effect of the privilege of homesteading in outlying districts having come to an end is beginning to show materially, firstly by reason of the fact that promiscuous settlement on land is not allowed in areas where there are timber stands, and secondly that the area applied for must be inspected before an agricultural or cultivation lease is issued. This has a very decided tendency to eliminate a great number of the settlements in outlying districts on or adjacent to timber areas where only a meagre existence could be eked out.

The practice, carried out in the past, of an individual homesteader locating in a certain area, and in order to obtain neighbours, a school and other community life, deliberately setting fires in order to clear additional land so that more settlers would come in, has, it is hoped, passed for all time.

The Prairie and Forest Fires Act, assented to April 8th, 1941, is filling a long felt want, and the enforcement of this Act, in which splendid co-operation has been given by the Royal Canadian Mounted Police, has certainly had a very retarding effect on fires being started.



Look-out tower, Saskatoon Mountain, Grande Prairie District

Prosecutions under the Act have disclosed the contention made in former reports that there is a very definite lack of co-operation regarding fire prevention in sections populated by Central Europeans.

Fire Season.—During the winter of 1940-41 the snow-fall along the east slope of the Rocky Mountains was much below normal, and approximately the same as had fallen the year before. The only heavy snow-fall received was in the south-western part of the Crowsnest-Bow River Forest. In the Grande Prairie and Peace River country the weather was extremely moderate, with a medium snow-fall, somewhat below normal. Spring arrived early throughout the province. With heavy winds the snow disappeared rapidly.

There was every appearance of an early and extremely hazardous fire season. Heavy rains in the southern and northern part of the province, however, occurred. The situation was not so favourable though in the central section. It was possible to extinguish or control the usual settlers' fires that occurred in the area north and east of Rocky Mountain House and south and west of Edmonton, until an extremely high wind occurred on April 26th. This unfortunately drove small clearing fires entirely out of control, and one of the worst fire periods in the history of this section of the country was experienced.



Headquarters at Grande Prairie, showing poles for radio aerials

This period lasted for nearly a month, during which time all personnel of the service in the district and numerous crews of fire-fighters were engaged day and night in an endeavour to save settlements, timber areas and even life. One fatality occurred. The life of a watchman of one of the saw-mills was lost. Greatly regretted, however, as was this tragedy, there was reason for extreme gratitude that as a result of the diligence of the staff and the co-operation of the general public, the loss of life was not much greater.

Immediately after the fire in this area was brought under control, another very serious fire situation developed in the Athabaska Valley in the vicinity of Pass Creek and the Old Man River, which destroyed a great deal of timber. The extinguishing of this fire necessitated the expenditure of large sums of money.

One of the largest fires in that area, the Chickadee Slash Fire, was reported under control when only of medium size. A prolonged dry spell with high winds, however, fanned this fire out of control and before it was finally extinguished late in July, millions of feet of standing timber were destroyed. This break-out is attributable to inexperience on the part of the ranger who was handling the fire. It was not in a difficult location, but lack of experience led him to believe it was safe when surrounded by trenches.

Inexperience is one of the factors with which the Forest Service has been forced to contend since the outbreak of war, due to the fact that no one subject to military call may be employed, and a number of the men who have been in the Department for years, and who are experienced in fire fighting, have gone on active service. The result is the employment of less experienced and less competent men. This condition must continue for the duration of the war, and the best results in fire suppression efforts, therefore, cannot be expected.

The late summer was very favourable to forest protection and occasional rains occurred, with the result that the fall fire hazard did not materialize to any great extent. Although there was a moderate hazard until winter set in during the latter part of November, the fall hazard never became great in any section of the province.

At the end of the fire season the forest cover was in the best condition with regard to moisture that it has been in for a number of years. Muskegs were

partly filled and small creeks that had been dry in the fall of the year for the past several years had running water in them. Unless a hot dry season with strong winds is experienced the danger of a high fire hazard in the spring of 1942 will not be anticipated.

Fire Prevention.—One of the first duties of the Forest Service is the prevention of fires. Success in this work needless to say is the determining factor in the requirements of fire suppression.

Fires from natural causes are not readily subject to preventive control, but fires caused by man, which represent the greatest percentage in the province, year by year, are controllable.



Forest fire "crowning", Rocky Mountain House district

Education of the general public regarding the dangers of forest fire is a most important preventive measure. From time to time publicity is obtained through newspaper articles and radio broadcasts, which warn citizens of the hazardous conditions under which forests exist, and which issue the precautions necessary to be taken to insure safety. Splendid co-operation with the press and with the different radio stations throughout the province has been experienced, leaving nothing to be desired in this respect. Publicity of this nature, however, has not been as intensive as might be desired. This has been due to the lack of time on the part of the Forestry personnel for the preparation of articles and radio addresses.

To offset this disadvantage, a very efficient form of publicity has been carried out continuously by direct contact between the field staff and persons using the forest areas for recreational and commercial purposes. In the Northern Alberta Forest District, where ranger districts are much larger, the personal contact is not as readily made, and, as a result, man caused fires in this area have been numerous.

Another hazard to be contended with, and which has been cited in previous reports, is that of trappers burning the grass along lakes and sloughs in order to more readily find muskrat runs; to which may be added the problem of winter campfires which are left improperly extinguished. Better success, however, is now anticipated in outlying districts when registered traplines are inaugurated in the areas outside of forest reserves.

BURNING PERMITS ISSUED, PROVINCE OF ALBERTA, 1941

<i>By the Forest Services:</i>		
Cypress Hills	59	
Crowsnest-Bow River	159	
Clearwater	8	
Brazeau-Athabaska		
By the Staff of the Forest Reserves		226
Westlock	66	
Breton	198	
Carrot Creek	46	
Calling Lake	51	
Lace La Biche	28	
Slave Lake	248	
Peace River	188	
Grande Prairie	103	
By the Staff of the Northern Alberta Forest District		928
<i>By Outside Agencies:</i>		
Honorary Fire Guardians	1,455	
Fire Guardians in Municipal Districts	169	
Royal Canadian Mounted Police	968	
Sub-total		2,592
TOTAL		3,746

PROSECUTIONS AND CONVICTIONS, PRAIRIE FIRES ACT, 1941

	Instituted by Forest Service	Instituted by other Agencies	Totals
Number of prosecutions	38	88	126
Number of convictions	34	71	105

Fire Detection.—It is a pleasure to be able to report that progress is being made in the provision for fire detection throughout the Northern Alberta Forest District. During the season under review the Goose Mountain look-out was constructed on section 32, township 66, range 14, west of the 5th meridian, and similar equipment to that used in other look-out towers was installed. This adds one more to the proposed system that is being built. Although progress is slow, it is expected, if continuance of the work is allowed, to eventually have at least the most hazardous portions of the province covered by look-outs.

In addition to the completion of the Goose Mountain look-out, all cars operated by timber inspectors are equipped with two-way radio communication, with S.P.F. sets, which were introduced into the service several years ago, and which have proved so successful in the United States Forest Service.

The total number of radio equipped cars now operated by the Alberta Forest Service is sixteen, and although there are times when transmission and reception are not of the best, they have nevertheless been found to be very serviceable and greatly assist in speedier notification of fires as well as assisting in the expediting of other work.

During the fire season under review the resultant smoke from the large fires in this province, as well as from fires in Saskatchewan brought in by the north-

east winds, and from British Columbia by west winds, made determination as to exact locality very difficult, and the visibility from a number of look-outs was cut at different times to a minimum. This resulted in some of the larger fires gaining considerable headway before it was possible to report them, and in some cases their discovery was made by ground patrols before they were visible to the lookout men, in spite of the size when first discovered.

The lack of visibility, by reason of smoke haze, is one of the factors with which all fire fighting organizations are forced to contend, and as yet no remedy has been found, other than constant vigilance. There is generally some period, however, during the day, either in the early morning or late evening, when observation improves.



Rangerstation at Jumping Pound, Bow River Forest

Fire Suppression.—The prolonged dry weather, which started during the first week in April and continued to the middle of July, brought about one of the highest fire hazards which has been experienced in the district from south of Rocky Mountain House to the Athabaska River valley.

Although the season throughout the province was unusually long, occasional showers occurred in other parts, in which the fire hazard did not at any time reach an extreme high.

It is desirable to point out once again that on the east slope of the Rocky Mountains, especially in the forest reserves, occurrences and losses from fire were held to a minimum, accentuating the fact that in the smaller districts, vigilance and energy of the staff can produce very effective fire control.

Emphasis is once more laid on the fact that the continued good records in the Rocky Mountain and Cyprus Hills forest reserves are in a great part attributable to the splendid co-operation, and care with fire, given by those using the reserves for camping and recreational purposes.

During the fire season of 1941, 445 fires were dealt with, 304 being in the large or C and D classes, 81 in class B and the remainder, under 10 acres in extent, in class A.

COMPARISON OF FIRE LOSSES BY PERCENTAGE

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Campers	23.7	52.8	38.9	35.4	42.3	38.3	35.9	27.4	28.8	26.0	20.9
Smokers	3.2	5.3	13.5	11.7	9.3	9.7	4.5	3.6	5.0	4.8	2.2
Settlers	21.9	17.1	17.4	17.9	8.2	11.7	20.7	14.6	14.8	12.2	22.7
Railway	6.6	4.5	2.8	5.0	10.3	4.0	9.3	4.2	4.6	6.7	7.6
Lightning .....	.6	2.6	5.2	7.5	1.0	14.1	2.2	2.3	4.0	2.8	1.6
Industrial Operations	1.9	1.1	1.7	4.2	1.0	3.2	.8	1.4	1.4	.6	1.4
Incendary	15.1	8.2	11.8	11.2	22.7	10.1	13.5	14.6	9.8	8.9	10.8
Public Works	1.4	.5	1.4	1.3	1.0	.4	.3	.8	.6	...	.2
Unclassified	1.5	1.6	...	2.5	2.1	2.0	7.2	9.0	13.4	16.9	8.8
Unknown	24.1	6.3	7.3	3.3	2.1	6.5	5.6	22.1	17.6	21.1	23.8

RAILWAY FIRE LOSSES, CALENDAR YEAR, 1941

This statement deals only with fires burning on forested territory under the supervision of the Alberta Forest Service, and which started within 300 feet of the centre line of the railway right of way.

Causes and number of fires:

Railway causes—Locomotives	20	
Employees	5	
Sub-total		25
Other causes—Campers and Travellers	1	
Settlers	11	
Unknown	10	
Unclassified	2	
Sub-total		24
TOTAL		49

Number of acres burned:

Slashing or old burn .....	...
Timber land .....	...
Young growth	3,542.5
Non-forested	1,341.5
TOTAL	4,884.0

Loss:

Timber .....	...
Young growth	\$15,951.25
Forest products	1,783.75
Other property	4.50
TOTAL	\$17,739.50

ANNUAL STATEMENT OF FIRES BY CAUSES, MONTHLY DISTRIBUTION, ETC., WITHIN AND OUTSIDE FOREST RESERVES, ALBERTA—CALENDAR YEAR, 1941

Cause	Number					P.C.	Damage	Area, Acres	Monthly Distribution												Fires Inside Provincial Forests		Fires Outside Provincial Forests	
									January	February	March	April	May	June	July	August	September	October	November	December	No.	Area, Acres	No.	Area, Acres
	A	B	C	D	Tot.																			
Camp-fires	23	13	32	26	94	21.1	\$ 551,948.00	394,868	2	1	2	25	27	20	4	3	6	1	2	1	7	220	87	394,648
Smokers	2	5	3	1	11	2.5	11,877.75	5,842	..	1	..	4	1	3	2	..	..	..	..	..	2	11	9	5,831
Settlers	2	18	40	41	101	22.7	220,903.50	194,157½	..	..	1	59	27	8	5	..	..	1	..	..	5	4,020	101	194,157½
Railways	10	14	10	1	35	7.9	15,943.75	5,089	1	..	..	11	12	8	2	..	..	1	..	..	..	..	30	1,069
Lightning	4	2	..	1	7	1.6	720.25	688	..	..	..	..	..	..	6	1	..	..	..	..	6	8	1	680
Industrial	1	2	..	3	6	1.3	14,913.00	8,744¾	..	..	..	3	2	1	..	..	..	..	..	..	..	..	6	8,744¾
Operations	4	6	16	21	47	10.6	181,780.37	85,993¼	..	..	..	18	22	5	..	..	2	..	..	..	..	..	47	85,993
Incendary .....	..	..	1	..	1	..2	..	45	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	45
Public Works	4	8	18	38	68	8.5	126,992.85	76,286	..	..	1	7	14	8	4	3	1	..	..	..	..	..	38	76,286
Unclassified .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown	10	13	33	49	105	23.6	925,899.96	583,711	..	..	..	46	35	16	4	2	2	..	..	..	2	238	103	583,473
TOTALS	60	81	143	161	445	100.0	\$2,050,979.43	1,355,424½	3	2	4	174	140	69	27	9	11	3	2	1	22	4,497	423	1,350,927¼
Per cent	13.5	18.2	32.1	36.2	..	..	..	..	.7	.4	.9	39.1	31.5	15.5	6.1	2.0	2.5	.7	.4	.2	4.9	..	95.1	..

FIRE CAUSES	NUMBER OF FIRES					LANDS AFFECTED								LOSS											SUPPRESSION COSTS			Burning Permits Issued
						Ownership		AREA	CONDITION				TIMBER (MERCHANTABLE AND CUT-OVER)						Loss of Timber	Loss of Young Growth	Loss of Other Property	Total Loss	Ranger Service	Other Expenditures	Total			
	SALVABLE			UNSAVABLE																								
	CLASS					Public, Acres	Private, Acres	Total, Acres	Merchantable Timber, Acres	Cut-over Timber, Acres	Young Growth, Acres	Not Forested, Acres	Saw-timber, M.ft.B.M.	Other, Cords	Depreciation	Saw-timber, M.ft.B.M.	Other, Cords	Loss										
	A	B	C	D	Total																							
FIRES WITHIN FOREST RESERVES																												
Campers	5		2		7	220		220	10 ¼		20 ¾	190						10 4	\$ 3.75	\$ 3.75	\$ 50.00		\$ 53.75	\$ 101.03	\$ 86.15	\$ 187.18		
Smokers	1	1			2	11		11				10							3.00	3.00	3.75		6.75	73.37	6.65	80.02		
Settlers																												
Railways	3		1	1	5	4,020		4,020	495		3,525			3,000	\$1,500.00	225	2,000	1,950.00	3,450.00	11,625.00		15,075.00	354.76	1,576.43	1,931.19			
Lightning	4	2			6	8		8			8							2	1.50	1.50	18.75		20.25	67.25	28.00	95.25		
Incendiary																												
Industrial Operations																												
Unclassified																												
Unknown		1	1		2	238		238	122 ¼		55 ¾	60				120 ½	12	186.50	186.50	90.00		276.50	271.99	129.33	401.32			
TOTALS	13	4	4	1	22	4,497		4,497	627 ½		3,609 ½	260		3,000	\$1,500.00	345 ½	2,028	\$ 2,144.75	\$ 3,644.75	\$ 11,787.50		\$ 15,432.25	\$ 868.40	\$ 1,826.56	\$ 2,694.96			
FIRES OUTSIDE FOREST RESERVES																												
Campers	16	14	30	26	86	392,558	2,090	394,648	103,952 ½	6,488	138,599	145,608 ½	965	14,470	\$ 1,015.00	52,179	626,451	\$ 304,645.50	\$ 305,660.50	\$245,833.75	\$ 400.00	\$ 551,894.25	\$ 1,909.01	\$ 34,275.68	\$ 36,184.69			
Smokers	1	3	3	1	8	4,529	1,302	5,831	4,615		608	608				12	22,321	11,061.25	11,061.25	809.75		11,871.00	85.83	656.46	742.29			
Settlers	2	18	40	41	101	163,051	31,106 ½	194,157 ½	23,023	11,885	61,012	98,237 ½	13,948	49,310	35,010.50	8,051	167,484	102,739.75	137,750.25	77,339.50	5,813.75	220,903.50	1,336.81	26,740.49	28,077.30			
Railways	6	14	9		29	942 ½	126 ½	1,069			193 ½	875 ½								793.75	75.00	868.75	33.10	144.72	177.82			
Lightning				1	1	680		680	160		420	100					800	300.00	300.00	400.00		700.00	26.62	174.25	200.87			
Incendiary	4	6	16	22	48	80,645 ¼	5,348	85,993 ¼	22,467	1,974	45,226 ¼	16,326	7,575	34,700	12,650.00	15,206	144,045	91,786.25	104,436.25	73,870.87	3,473.25	181,780.37	985.01	20,066.47	21,051.48			
Industrial Operations	1	2			3	8,741	3 ¾	8,744 ¾	1,470 ¼	1,733 ½	4,540	1,001	2,561		500.00	1,500	4,340	3,713.00	4,213.00	7,450.00	3,250.00	14,913.00	70.79	1,721.27	1,792.06			
Unclassified	5	6	9	19	39	75,916	370	76,286	14,692	4,700	34,235 ½	22,658 ½	4,361			6,328 ½	101,210	72,264.35	72,264.35	52,128.50	2,600.00	126,992.85	823.53	8,904.55	9,728.08			
Unknown	12	14	31	47	104	570,424	13,049	583,473	201,630	7,685	200,358	173,800	14,300	20,000	8,800.00	118,398	838,848	427,004.10	435,804.10	470,318.36	19,501.00	925,623.46	2,484.19	65,401.18	67,885.37			
Public Works			1		1	45		45			45												3.65		3.65			
TOTALS	47	77	139	160	423	1,297,531 ¾	53,395 ¾	1,350,927 ½	372,009 ¾	34,465 ½	485,237 ¾	459,215	43,710	118,480	\$ 57,975.50	201,674 ½	1,905,499	\$1,013,514.20	\$1,071,489.70	\$928,944.48	\$35,113.00	\$2,035,547.18	\$ 7,758.54	\$160,035.03	\$167,793.57			
FIRES WITHIN AND WITHOUT FOREST RESERVES																												
Campers	21	14	32	26	93	392,778	2,090	394,868	103,962 ½	6,488	138,619	145,798 ½	965	14,470	\$ 1,015.00	52,179	626,461	\$ 304,649.25	\$ 305,664.25	\$245,883.75	\$ 400.00	\$ 551,948.00	\$ 2,010.04	\$ 34,361.83	\$ 36,145.84			
Smokers	2	4	3	1	10	4,540	1,302	5,842	4,615 ¼		608 ¾	618				12	22,325	11,064.25	11,064.25	813.50		11,877.75	159.20	663.11	822.31			
Settlers	2	18	40	41	101	163,051	31,106 ½	194,157 ½	23,023	11,885	61,012	98,237 ½	13,948	49,310	35,010.50	8,051	167,484	102,739.75	137,750.25	77,339.50	5,813.75	220,903.50	1,336.81	26,740.49	28,077.30			
Railways	9	14	10	1	34	4,962 ½	126 ½	5,089	495		3,718 ½	875 ½		3,000	1,500.00	225	2,000	1,950.00	3,450.00	12,418.75	75.00	15,943.75	387.86	1,721.15	2,109.01			
Lightning	4	2		1	7	688		688	160		428	100					802	301.50	301.50	418.75		720.25	93.87	202.25	296.12			
Incendiary	4	6	16	22	48	80,645 ¼	5,348	85,993 ¼	22,467	1,974	45,226 ¼	16,326	7,575	34,700	12,650.00	15,206	144,045	91,786.25	104,436.25	73,870.87	3,473.25	181,780.37	985.01	20,066.47	21,051.48			
Industrial Operations	1	2			3	8,741	3 ¾	8,744 ¾	1,470 ¼	1,733 ½	4,540	1,001	2,561		500.00	1,500	4,340	3,713.00	4,213.00	7,450.00	3,250.00	14,913.00	70.79	1,721.27	1,792.06			
Unclassified	5	6	9	19	39	75,916	370	76,286	14,692	4,700	34,235 ½	22,658 ½	4,361			6,328 ½	101,210	72,264.35	72,264.35	52,128.50	2,600.00	126,992.85	823.53	8,904.55	9,728.08			
Unknown	12	15	32	47	106	570,662	13,049	583,711	201,752 ¼	7,685	200,413 ¾	173,860	14,300	20,000	8,800.00	118,518 ½	838,860	427,190.60	435,990.60	470,408.36	19,501.00	925,899.96	2,756.18	65,530.51	68,286.69			
Public Works			1		1	45		45			45												3.65		3.65			
TOTALS	60	81	143	161	445	1,302,028 ¾	53,395 ¾	1,355,424 ½	372,637 ¾	34,465 ½	488,846 ¾	459,475	43,710	121,480	\$ 59,475.50	202,020	1,907,527	\$1,015,658.95	\$1,075,134.45	\$940,731.98	\$35,113.00	\$2,050,979.43	\$ 8,626.94	\$161,861.59	\$170,488.53			
SUMMARY BY DIVISIONS																												
N.A.F.D.*	38	70	133	150	391	1,229,619 ½	43,164	1,272,783 ½	366,490	24,475 ½	466,835	414,983	39,459	75,480	\$ 28,863.00	196,189 ½	1,883,304	\$ 997,001.83	\$1,025,864.83	\$897,837.61	\$30,973.00	\$1,954,675.44	\$ 7,017.00	\$149,963.30	\$156,980.30			
Clearwater	6	4	5	8	23	62,053 ¾	9,591 ¾	71,645	5,443 ¾	9,980	17,951 ¾	38,270	4,251	43,000	29,112.50	5,417	22,014	16,382.50	45,495.00	30,546.87	4,140.00	80,181.87	697.74	7,796.06	8,493.80			
Crownsnest-Bow	7	1	1		9	50		50			20	30								50.00		50.00	114.81	65.25	180.06			
Brazeau-Athabaska	9	6	4	3	22	10,306	640	10,946	704	10	4,040	6,192		3,000	1,500.00	413 ½	2,209	2,274.62	3,774.62	12,297.50		16,072.12	797.39	2,087.02	2,884.41			
Cypress Hills																								1,949.96	1,949.96			
TOTALS	60	81	143	161	445	1,302,028 ¾	53,395 ¾	1,355,424 ½	372,637 ¾	34,465 ½	488,846 ¾	459,475	43,710	121,480	\$ 59,475.50	202,020	1,907,527	\$1,015,658.95	\$1,075,134.45	\$940,731.98	\$35,113.00	\$2,050,979.43	\$ 8,626.94	\$161,861.59	\$170,488.53			

*N.A.F.D.—Northern Alberta Forest District

SUMMARY SHOWING TOTAL NUMBER OF FIRES AND BURNT OVER AREA
FROM 1931 TO 1941, INCLUSIVE

Year	Total No. of Fires	Total Acreage	Not Forested	Net Acreage
1931	622	604,876.12	209,064.75	395,811.37
1932	379	136,117.89	68,253.42	67,864.47
1933	288	93,765	30,955.88	62,809.12
1934	240	58,870	21,656.5	37,213.5
1935	97	6,319.75	3,267.75	3,052
1936	248	204,454	46,534	157,920
1937	375	835,259	155,069.5	680,189.5
1938	521	1,758,345.5	842,384	915,961.5
1939	499	429,139.25	159,774.5	269,364.75
1940	313	474,244.25	108,597.5	365,646.75
1941	445	1,355,424.5	459,475	895,949.5
	4,027	5,956,815.26	\$2,105,032.80	3,851,782.46



Fire-guard roads, Cypress Hills Forest

Radio.—In preparation for the fire season of 1941 in the Northern Alberta Fire District, the nine radio-equipped lookouts were checked as to the serviceability of their equipment. They were all in operation by the 25th of April.

During the spring and early summer all cars operated by timber inspectors were equipped with two-way radios. This brought the number of radio-equipped two-way "talkie" cars operated by the Forest Service to sixteen. Additional portable equipment was purchased and distributed, bringing the total of this class of equipment to fifty-seven sets throughout the province.

In order to take care of the increased coverage from the main station in Edmonton, additional two radio frequency channels were constructed to conform



Reproduction of lodgepole pine, Cypress Hills Forest

with the original design and were added to the existing transmitter. This addition provides a band switching five channel transmitter at the Edmonton office, enabling all headquarters stations in the province to be contacted direct from the Edmonton office.

The same difficulty is being encountered in securing necessary replacements and new equipment for radios that is being experienced in other provincial services and by commercial enterprises. This shortage is due, of course, to priorities, and to preferences the armed forces have over others. As previously mentioned, the difficulty of obtaining trained personnel is also a problem of the communication system.

The new look-out, known as the Goose Mountain look-out, was constructed on the location already stated and was placed in operation on August 19th.

FOREST ADMINISTRATION

Provincial Forest Reserves.—Timber disposal from the forest reserves exceeded that of the previous season, and revenue in this respect showed a marked increase.

The administration of pastures, drift fences, oil well drilling sites, trappers' cabins, etc., was carried out with practically the same volume of business as that of previous years.

Demands for mining timber of all classes were very much in evidence, and the Crowsnest area was severely taxed. The few remaining stands of dry timber that are readily accessible to the mines are being rapidly depleted, and it is becoming more and more necessary that timber suitable for mining use be hauled from greater distances.

TIMBER CUT UNDER PERMIT, ALBERTA FOREST RESERVES—FISCAL YEAR 1941-42

	Cypress Hills	Crowsnest- Bow River	Clearwater	Brazeau- Athabaska	Totals
Number of permits	297	227	25	30	579
Fuelwood, dry (cords)	832	1,768	55	49	2,704
Fuelwood, green (cords) .....	.....	13	.....	44	57
Mine timber, dry (lineal feet) .....	.....	748,814	.....	55,600	804,414
Mine timber, green (lineal feet) .....	.....	.....	42,450	.....	42,450
Lagging (cords) .....	.....	14	.....	.....	14
Lagging (lineal feet) .....	.....	542,400	17,500	.....	559,900
Fence posts	22,060	7,292	1,250	36	30,638
Sawlogs (F.B.M.)	4,000	318,407	4,500,000	.....	4,822,407
Round timber (pieces)	14,943	17,657	199	200	32,999
Round timber (lineal feet) .....	.....	18,043	1,708	220	19,971
Telephone poles (pieces) .....	.....	350	.....	.....	350
Tram ties (lineal feet) .....	.....	400	.....	.....	400

TIMBER OPERATIONS ON FOREST RESERVE TIMBER SALES—FISCAL YEAR 1941-42

	Crowsnest- Bow River	Clearwater	Brazeau- Athabaska	Totals
Number of active operations	23	5	17	45
Lumber, feet, board measure	9,865,487	684,219	3,200,115	13,749,821
Railway ties .....	.....	40,725	102,118	142,843
Piling	7,265	13,400	.....	20,665
Mine timber, lineal feet	370,907	691,388	967,853	2,030,148
Lagging, lineal feet	274,014	34,350	.....	308,364
Building logs and culvert timber, lineal feet .....	.....	.....	1,650	1,650
Fence posts	1,546	.....	50	1,596
Fuelwood, cords	343	.....	100	443
Tramway ties, number .....	.....	.....	2,054	2,054
Poles	785	.....	.....	785
Rails	625	.....	.....	625

Provincial Lands.—As pointed out in the first part of this report, the demand for forest products has reached an all-time high, and this is reflected in the revenue that has been obtained.

Although the prices did not increase in the same proportion they did during the war years of 1914-18, a slight increase has been allowed by the Timber Controller, which takes care in part of the increased living costs, and allows for a reasonable profit. Demands for dry seasoned lumber exceed the supply, and if it were not for the ceiling prices set by the Timber Controller, prices of lumber would jump skyward. The problem now confronting timber operators is the shortage of labour.

Regulations for the disposal of lumber on provincial lands are working out quite satisfactorily, and it is pleasing to be able to report that the regulations now authorizing the securing of larger areas containing more timber—to insure greater permanency and longer tenure of operation—have met with general approval.

During the year under review the administration of the timber on school lands was transferred to this Division from the School Lands Division. The following tables summarize the timber business transacted at Head Office for the Edmonton office, and also at the land agencies at Calgary and Peace River.

STATEMENT OF TIMBER OPERATIONS FOR 1941-42 ON PROVINCIAL LANDS
IN THE EDMONTON DISTRICT AND IN THE CALGARY AND PEACE RIVER LAND AGENCIES

(a) OPERATIONS ON LICENCE TIMBER BERTHS:

	Head Office Edmonton District	Calgary Agency	Peace River Agency	Totals
Number of active operations	51	8	.....	59
Lumber, feet, board measure	111,636,717	9,065,032	.....	120,701,49
Railway ties	101,462	.....	.....	101,462
Mine timber, lineal feet	.....	2,360,598	.....	2,360,598
Lath	3,512,050	.....	.....	3,512,050
Building logs, lineal feet	5,780	.....	.....	5,780
Fuelwood, cords	.....	63 1/2	.....	63 1/2
Lagging, lineal feet	.....	86,442	.....	86,442
Snow fence lath	364,290	.....	.....	364,290

(b) OPERATIONS ON TIMBER PERMIT BERTHS:

	Head Office Edmonton District	Calgary Agency	Peace River Agency	Totals
Number of active operations	196	35	.....	231
Lumber, feet, board measure	78,658,887	9,263,329	.....	87,922,216
Railway ties	546,197	43,216	.....	589,413
Mine timber, lineal feet	.....	114,604	.....	114,604
Lath	736,050	422,450	.....	1,158,500
Lagging, lineal feet	.....	389,644	.....	389,644
Telegraph and telephone poles, lineal feet	2,465	.....	.....	2,465
Building logs and culvert timber, lineal feet	24,100	.....	.....	24,100
Fuelwood, cords	3,246	721	.....	3,967
Shingles	294,000	.....	.....	294,000
Fence posts	1,783	.....	.....	1,783

(c) OPERATIONS UNDER SPECIAL TIMBER PERMITS:

(Sec. 68 of the Timber Regulations)

	Head Office Edmonton District	Calgary Agency	Peace River Agency	Totals
Number of active operations	318	48	.....	366
Lumber, feet, board measure	15,691,994	2,556,732	.....	18,248,726
Railway ties	184,171	27,225	.....	211,396
Piling, lineal feet	3,986	.....	.....	3,986
Mine timber, lineal feet	7,740	.....	.....	7,740
Lagging, lineal feet	2,000	.....	.....	2,000
Telegraph and telephone poles, lineal feet	23,460	14,160	.....	37,620
Building logs and culvert timber, lineal feet	2,444	.....	.....	2,444
Fence posts	810	.....	.....	810
Fuelwood, cords	205	15	.....	220
Shingles	259,440	.....	.....	259,440
Lath	939,700	801,555	.....	1,741,255
Birch veneer, lbs.	4,340,407	.....	.....	4,340,407

* (d) PROVINCIAL LANDS TIMBER PERMITS ISSUED AUTHORIZING
THE CUTTING OF MATERIAL SHOWN HEREUNDER:

Number of permits issued	1,116	169	685	1,970
Building logs, lineal feet	21,419	10,996	41,433	73,848
Mining timber, lineal feet	90,850	816,500	.....	907,350
Telephone poles	29,925	4,000	.....	33,925
Piling, lineal feet	.....	.....	950	950
Lumber, feet, board measure	6,310,552	145,834	3,646,012	10,102,398
Fence posts	88,340	47,890	66,450	202,680
Roof poles	30,320	430	45,316	76,066
Fence rails	145,575	5,130	246,000	396,705
Fuelwood, cords	4,471	1,973	1,471	7,915
Railway ties	1,700	600	.....	2,300
Shingles	97,500	.....	175,000	272,500
Shingle bolts, cords	133	39	132	304
Lath bolts	60	.....	.....	60
Lath	10,000	.....	.....	10,000

*The figures shown under this heading are the amounts authorized to be cut. The amounts actually cut under this heading are not available.

STATEMENT OF TIMBER OPERATIONS FOR 1941-42 ON SCHOOL LANDS
IN THE EDMONTON DISTRICT AND IN THE CALGARY AND PEACE RIVER LAND AGENCIES

				Totals		
				Calgary Agency	Peace River Agency	
				Edmonton District		
				Head Office		
(a) OPERATIONS ON TIMBER PERMIT BERTHS:						
Number of active operations				19	5	24
Lumber, feet, board measure				10,558,839	3,311,845	13,870,684
Railway ties				16,666		16,666
Lath				327,250	790,500	1,117,750
(b) OPERATIONS UNDER SPECIAL TIMBER PERMITS:						
(Section 25 (g) of the Timber Regulations)						
Number of active operations				37	16	53
Lumber, feet, board measure				1,465,793	973,896	2,439,689
Railway ties				18,218	4,525	22,743
Mine timber, lineal feet				11,566		11,566
Fuelwood, cords					20	20
Birch Veneer, lbs.				451,615		451,615
* (c) SCHOOL LANDS TIMBER PERMITS ISSUED AUTHORIZING THE CUTTING OF MATERIAL SHOWN HEREUNDER:						
Number of permits issued				245	23	294
Building logs				6,858	2,600	9,458
Mining timber				23,000		23,000
Telephone poles				600		600
Piling, lineal feet				270		270
Lumber, feet, board measure				353,439	35,000	487,439
Fence posts				9,720	4,150	13,870
Roof poles				300	75	375
Fence rails				733		733
Fuelwood, cords				1,328	138	1,492
Mine ties				1,500		1,500
Shingles				8,000		8,000
Shingle bolts, cords				2		5

*The figures shown under this heading are the amounts authorized to be cut. The amounts actually cut under this heading are not available.

FORESTRY

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SUMMARY OF TIMBER OPERATIONS ON PROVINCIAL AND SCHOOL LANDS, 1941-42

	PROVINCIAL LANDS					SCHOOL LANDS			FOREST RESERVES				
	Licence Timber Berths	Permit Timber Berths	Special Section 68	Other Permits	Permit Berths	Special Section 25 (g)	Other Permits	Timber Sales	Timber Permits	Totals	Timber Sales	Timber Permits	Totals
Number of active operations	59	231	366	1,970	24	53	294	45	579	3,621			
Lumber, feet, board measure	120,701,749	87,922,216	18,248,726	10,102,398	13,870,684	2,439,689	487,439	13,749,821	4,822,407	272,345,129			
Railway ties	101,462	589,413	211,396	2,300	16,666	22,743		142,843		1,086,823			
Piling, lineal feet			3,986	950			270	20,665		25,871			
Mine timber, lineal feet	2,447,040	504,248	9,740	907,350		11,566	23,000	2,338,512	1,420,764	7,662,220			
Telegraph and telephone poles, lin. ft.		2,465	37,620	33,925			600	1,650	8,750	137,341			
Building logs and culvert timber, lin. ft.	5,780	24,100	2,444	73,848			9,248	625	19,971	598,063			
Fence rails				396,705			735	1,596	30,638	251,377			
Fence posts		1,783	810	202,680			13,870						
Roof poles				76,066			375			76,441			
Fuelwood, cords	63 ½	3,967	220	7,915		20	1,492	443	2,761	16,881 ½			
Mine ties, number							1,500			1,500			
Shingles		294,000	259,440	272,500			8,000			833,940			
Shingle bolts, cords							5			309			
Lath	3,512,050	1,158,500	1,741,255	10,000	1,117,750					7,539,555			
Lath, snow fence	364,290			60						364,290			
Lath bolts, cords										60			
Tramway ties													
Round timber, pieces								2,054	400	2,454			
Birch veneer, lbs.			4,340,407			451,615		785	32,999	33,784			
Number of inspection reports submitted by timber inspectors										4,792,022			
Number of timber seizures made										2,488			
										198			

GRAZING

In 1938 it was necessary to reduce the carrying capacity of various ranges throughout the southern reserves, with a view to bringing back the grass cover and obtaining better forage conditions. This situation was brought about by the cycle of dry years which had reduced moisture and vegetation on the land to a serious extent.

The increased moisture made it possible to slightly increase the carrying capacities in 1939, 1940 and again in 1941. In the spring of 1941 the early precipitation was light, but sufficient moisture was received to keep the top soil damp. This condition lasted throughout the months of April and May, while during the month of June heavy showers fell every few days. Early spring grass was a bit slower than usual in starting, but once started the growth was fast and rank, with the result that, as a whole, the forage crop was considered slightly better than in the previous year.

Practically all stock leaving the grazing areas in the fall was in excellent condition, the exception being a few that were grazed in higher altitudes where the season is very short. This was not, however, due to a shortage of grass, but rather to the shortness of the season in these areas, which did not permit the stock sufficient time to put on the required weight before they were removed.

The ranges in all districts were reported in excellent condition with reserve forage available, and no over-grazing was reported.

The market for cattle was excellent throughout the year, and prices showed a substantial increase over those paid for the past number of years. On the fall market fat steers brought as much as \$8.50 per hundred pounds, fat cows \$80.00 per head and calves \$30.00 per head.

The market for horses was fair, with prices ranging from \$60.00 to \$75.00 per head. The market for heavier horses, however, showed no improvement over previous years; in fact there was very light demand for this class of stock.

GRAZING STATEMENT—ALBERTA FOREST SERVICE, 1941-42

Forest	No. of Permits	No. of Horses	No. of Cattle	No. of Sheep
Cypress Hills	39	411	2,249	.....
Crowsnest-Bow River	284	1,799	19,911	4,735
Clearwater	48	548	210	.....
Brazeau-Athabaska	108	574	81	10
TOTALS	479	3,332	22,451	4,745

COMPARATIVE STATEMENT, GRAZING—ALBERTA FOREST SERVICE

	1931	1932	1933	1934	1935	1936	1937
Number of permits	456	606	493	517	533	497	498.4
Number of cattle	15,041	20,086	20,230	22,557	25,097	23,407	18,921
Number of horses	3,417	3,377	3,185	2,541	2,207	2,441	3,418
Number of sheep	4,379	7,465	6,705	3,078	4,114	5,443	3,174
	1938	1939	1940	1941	Totals	Average	
Number of permits	437	482	435	497	5,482	498.4	
Number of cattle	22,280	22,386	23,831	22,451	236,287	21,480.6	
Number of horses	3,024	2,731	3,194	3,332	32,867	2,987.9	
Number of sheep	4,791	6,883	3,954	4,745	54,731	4,975.5	

IMPROVEMENTS

The continuance in shortage of funds, existing through the past several years, has forced the reduction of construction, such as buildings, new telephone lines, roads and other structures, to an absolute minimum. It was possible, however, to make some progress each year in the construction of certain buildings which required renewal, together with the carrying out of extensive repairs.

Although the season was very favourable to fire suppression, it was necessary to spend a great deal of time in fire patrol, and there was a long hazardous period during which it was necessary to keep constant vigilance.



Stop-over cabin, Sentinel district, Bow River Forest



Tourist shelter, Livingstone district, Crowsnest Forest

The same amount of ranger labour, as was available last year, could not be expended in maintenance and new construction work. In the Crowsnest-Bow River Forest, however, a substantial start was made on the Aura ranger station house. The work done covered the building of the log walls, sheeting and part shingling of the roof, laying the first floor and constructing the verandah. A garage was constructed of logs at the Big Horn ranger station, and a new stable was constructed at the Elbow ranger station.

A Fisheries cabin, to accommodate Fisheries' officers and to store equipment at the Kananaskis administration site, was completed during the period under review.

A cabin was completed on the Clearwater forest, at the head-quarters site of the Clearwater district, for the accommodation of the assistant forest ranger.

The James River cabin, located on the east half of section 1, township 34, range 8, west of the 5th meridian, was erected, and a building, 20' \times 26' started last season as quarters for the assistant ranger of the district was nearly completed. A new garage was constructed on the site of the Red Deer ranger station.

On the Brazeau-Athabaska forest two cabins were erected, being the Leyland cache for the purpose of storing equipment and for providing a place for repairs. This cache was erected on section 8, township 47, range 23, west of the 5th meridian on the Leyland ranger station grounds. The Yellowhead cache for the same purpose was erected adjacent to the Yellowhead cabin on section 2, township 50, range 23, west of the 5th meridian. In addition to these cabins, a number of small buildings and sheds was erected.

It becomes increasingly difficult to maintain the large number of buildings with the small sums that are appropriated for this purpose. As the condition of buildings is often taken as a criterion of the industry, prosperity and character of the occupants in normal life, every effort should be made to keep government buildings in first class repair. With constantly decreasing appropriations, however, this becomes more and more difficult. The effort to do all that is possible with the funds available is, however, continued, with the ever present hope that at some time more money will be appropriated.

IMPROVEMENTS—STATEMENT OF MAN-DAYS WORKED

NEW CONSTRUCTION PROJECTS:

Forest	Houses	Garages, Sheds, etc.	Fences	Fields (breaking) in acres	Water Supplies	Telephones (miles)	Corrals	Barns and Stables	Bridges	Look-out Towers	Trails (miles)	Cabins	Fireguard Roads (miles)	Tourist Stoves	Miscel- laneous
Clearwater	48.5	9.5	...	...	...	...	27	...	...	...	28	134.5	...	...	70
Cypress Hills	33	7	...	...	...	...	23	...	...	...	16	128	...	...	...
Bow River	27	34.5	...	...	...	...	...	94	...	...	70	13	...	...	...
Athabaska	39.5	57.5	...	...	...	4	...	...	...	...	7	...	...	...	...
Brazau	47.5	146	55.5	...	...	7	...	...	...	...	...	...	...	...	...
Crowsnest	74.5	246.5	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	157	494	55.5	...	...	11	50	94	...	...	121	275.5	...	...	70

MAINTENANCE PROJECTS:

Forest	Houses	Cabins	Barns and Stables	Telephones (miles)	Trails (miles)	Roads (miles)	Fences	Corrals	Water Supplies	Garages, Sheds, Etc.	Look-out Towers and Cabins	Grounds	Hay Meadows & Pastures	Ferries	Miscel- laneous
Clearwater	48.5	9.5	18	261.5	300.5	108.5	148	4	18.5	17	...	67	10.5	10	11
Cypress Hills	33	7	6	49	312	443	8.5	1.5	21	13.5	...	8.5	...	...	13.5
Bow River	27	34	13.5	235.5	312	443	264	21	21	6.5	...	64	17	...	11.5
Athabaska	39.5	85.5	5	84.5	289	6	36.5	...	5.5	12.5	30.5	35.5	26	...	4
Brazau	47.5	60	5.5	199	325	109.5	63	3	...	15	8.5	19.5	5	...	...
Crowsnest	74.5	...	11.5	258.5	127.5	109.5	172.5	23.5	11.5	19.5	1.5	46.5	21.5	...	6
TOTALS	270	196	59.5	1,088	1,354	667	692.5	53	56.5	84	40.5	241	75.5	10	46

PUBLICITY

It is regretted that it becomes necessary to report again the inability to make any substantial progress in the matter of publicity. The press and different radio stations have given splendid co-operation by inserting news items and by making announcements over the air regarding fire hazards, but lack of staff has not permitted the required time to prepare and deliver addresses and to write articles.

Publicity is an extremely important phase of fire prevention. Although the forests which are being protected belong to the public, and it is their definite duty to protect them, human nature is so constituted that it must be repeatedly reminded of this duty in order that a proper sense of responsibility may be maintained.

NURSERY AND TREE DISTRIBUTION

Continued progress is being made in tree nursery work at the Oliver Mental Institute and the Fort Saskatchewan and Lethbridge gaols. The progress being made is very gratifying, as information gained from year to year is being constantly added to in the knowledge of different exotic trees which can be successfully propagated in this province. This knowledge will be invaluable when funds are available for reforestation. It will then be possible to plant certain trees, which have been tested to this climate, and which are more valuable for all purposes than some of the native species. In this way the existing forests will not only be improved, but it will also be possible to plant denuded lands with trees which will eventually produce more valuable forest products.

While engaged in these experiments, the distribution of trees throughout the province was carried out as in former years. Reports are received from time to time commending this service that is being rendered, as well as the healthy condition of the transplants. With benefits being derived by some of the earlier planters, an ocular example being provided, more farmers are taking advantage of the opportunity for planting trees, which year by year is offered by this service.

Tree Distribution.—The following species and quantities were given and sent out from Oliver in the spring of 1942:—

<i>Transplants:</i>	
White Spruce (<i>Picea glauca</i>)	33,710
Lodgepole Pine (<i>Pinus murrayana</i>)	9,885
Red Pine (<i>Pinus resinosa</i>)	5,900
Green Ash (<i>Fraxinus pennsylvanica</i>)	12,645
Bur Oak (<i>Quercus macrocarpa</i>)	13,955
Douglas Fir (<i>Pseudotsuga mucronata</i>)	11,160
Siberian Larch (<i>Larix sibirica</i>)	2,538
White Oak (<i>Quercus alba</i>)	1,795
Red Oak (<i>Quercus rubra</i>)	2,040
American Elm (<i>Ulmus americana</i>)	930
	<hr/>
	94,558
<i>Cuttings:</i>	
Laurel Leaf Willow (<i>Salix pentandra</i>)	15,599
Golden Willow (<i>Salix vitellina</i>)	14,390
North-west Poplar (<i>Populus</i>)	10,925
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	40,914
<i>Seedlings:</i>	
Colorado Blue Spruce (<i>Picea pungens</i>)	400
White Spruce (<i>Picea glauca</i>)	45,000
Sitka Spruce (<i>Picea sitchensis</i>)	200
Douglas Fir (<i>Pseudotsuga mucronata</i>)	200
Jackpine (<i>Pinus Banksiana</i>)	500
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	46,300
<i>Ornamental Species:</i>	
Cedar (<i>Thuja occidentalis</i>)	10
Birch (<i>Betula alba</i>)	59
Flowering Almond (<i>Prunus triloba</i>)	93
Ginnalian Maple (<i>Acer ginnala</i>)	29
Silver Maple (<i>Acer Saccharinum</i>)	3
Honeysuckle (<i>Lonicera ciliosa</i>)	77
Red Elderberry	38
Regosa Rose Bushes	17
Eastern Cedar (<i>Thuja occidentalis</i>)	5
Weeping Birch	6
Mountain Ash (<i>Pyrus americana</i>)	2
Mock-orange (<i>Syringa-Philadelphus Lewisii</i>)	28
Plum (<i>Prunus nigra</i>)	8
Hawthorne (<i>Crataegus</i>)	104
Horse Chestnut (<i>Hippocastanum</i>)	2
Spirea	100
Basswood (<i>Tilia americana</i>)	2
Lilacs (<i>Syringa japonica</i>)	200
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	783
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	182,555
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MILEAGE TRAVELLED BY EMPLOYEES OF THE ALBERTA FOREST SERVICE
FISCAL YEAR 1941-42

Divisions	Foot	Saddle	Driving	Speeder	Auto	Canoë	Rowboat	Motorboat	Plane	Railway	Other	Totals
Northern Alberta Forest District	34,874.5	35,108	18,733.5	17,275	123,021	1,212	625	5,301.5	235	9,804	551	246,740.5
Crownest-Bow River Forest	3,694	34,063	3,486	1,374	65,009	.....	.....	17	.....	980	.....	107,249
Clearwater Forest	4,815	15,321	3,205	1,374	39,466	.....	.....	.....	.....	717	.....	64,898
Brazeau-Athabaska Forest	4,459	16,860	1,774	4,462	19,843	.....	.....	.....	.....	2,756	60	50,214
Cypress Hills Forest	62	764	46	.....	4,720	.....	.....	.....	.....	.....	.....	5,592
Radio Division	298	12	218	.....	16,360	.....	.....	.....	544	2,410	518	20,360
Game Guardians in N.A.F.D.	3,367	3,266	5,737	197	18,449	.....	.....	.....	.....	2,165	1,335	34,516
TOTALS	51,569.5	105,394	33,199.5	23,308	286,868	1,212	625	5,318.5	779	18,832	2,464	529,569.5

Fisheries and Game Administration

REPORT OF THE FISH AND GAME COMMISSIONER, E. S. HUESTIS

FISHERIES BRANCH

At the beginning of the fiscal year 1941-42 the Fisheries Branch returned to the Department of Lands and Mines. This Branch had been, for a number of years, attached to this Department, but at the end of the fiscal year 1936-37 it was transferred, along with the Game Branch, to the Department of Agriculture, and has remained under that Department until the opening of the fiscal year now under review.

When the Department again took over the direction of the Fisheries Service a careful examination was made of existing policy and every means of information was obtained by studying the experiences of various agencies throughout the North American Continent, with a view to securing the best possible administration of Alberta's fisheries. In this and in all other investigation work, together with the setting up of a policy, the Branch has been extremely fortunate in having the services of Doctor R. B. Miller of the Zoological Department of the University of Alberta, who is thoroughly competent to advise on all such matters.

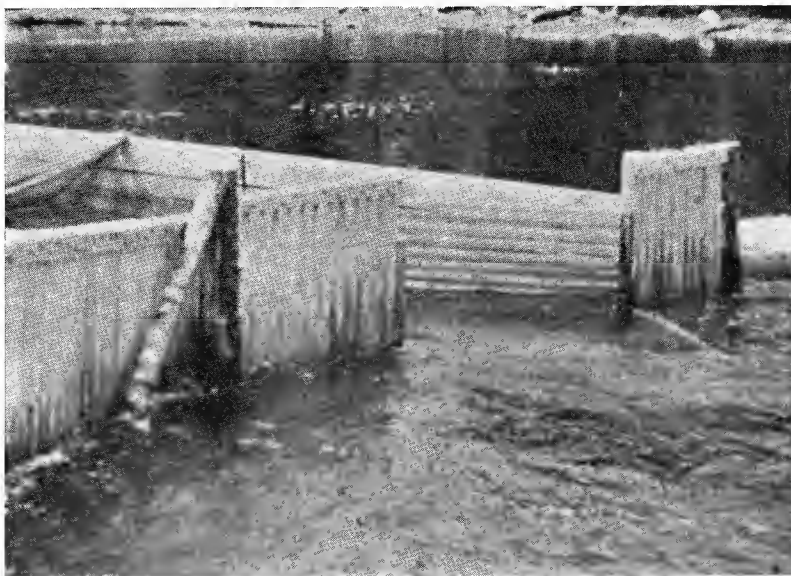
It was found that the policy of distribution of fry in angling streams throughout the province had not materially increased the fish population due to many causes. A study of this policy, and the results obtained in other parts of the continent, was made and it was found that the policy adopted in Alberta and used in other parts of North America was not proving satisfactory.

On examining the results of other systems used in various parts of the continent, it was found that the most successful procedure for money expended was in the distribution of fingerlings of as large size as possible throughout the spring season. In order to carry out such a policy it was realized that fairly large expenditures would be required in the construction of rearing ponds throughout Alberta, and that such rearing ponds should be strategically placed so as to cut down the cost of distribution and give a fair and equitable supply to each and every part of the province.

As soon as it was decided to proceed on such policy a search was immediately made throughout various areas, particularly those areas located near angling streams, for large springs where water control would not be difficult, for the erection of rearing ponds. Many such springs had been previously located and in some areas rearing ponds had already been established. These had not previously been tried for the holding of fish throughout the winter and examination had to be made not only of new springs, but also of those already in existence in order to determine the possibility of retaining fish in the ponds throughout the winter months.

In the selection of a new policy and in the management of angling waters, commercial lakes and other matters pertaining to the Fisheries Service, reference was made from time to time to the Alberta Fish and Game Association and to the Department of Zoology of the University of Alberta; discussion surrounding these matters was also carried out with the commercial fisherman, who is a vitally interested party in the handling of commercial fish. Every assistance given to the Fisheries Service by these people has been greatly appreciated.

The large commercial fish hatchery at Canyon Creek was remodelled during the year as far as power supply was concerned. For a number of years steam was used at this plant, but the machinery had depreciated to the extent where it was found advisable to replace it. In doing so it was found to be more advantageous and economical to replace the steam plants by the more modern diesel plants which were found to give excellent service.



Fish Trap at Kananaskis

COMMERCIAL FISHING

A total of 5,920,099 pounds of all species was taken by commercial fishermen during the fiscal year of 1941-42. Following are the amounts caught of each species, the value to the fishermen and the marketed value.

	Pounds	Landed Value	Marketed Value
Mixed Fish	312,857	\$ 3,076.82	\$ 6,153.64
Perch	46,958	1,896.14	4,306.49
Pickereel	265,636	8,723.32	20,953.31
Pike	495,167	9,811.51	24,600.87
Trout (Lake)	32,393	2,040.40	6,900.74
Tullibee	2,470,412	26,154.14	52,307.68
Whitefish	2,296,676	146,698.05	321,914.65
TOTALS	5,920,099	\$198,400.38	\$437,137.38

With the exception of necessary replacement of nets, new equipment purchased during the season was limited in quantity. Commercial fishing licences issued during the year totalled 1,565, a reduction of 143 from the previous year. Domestic licences, permitting the taking of fish for home consumption only, reached a total of 266.

Commercial fishing generally speaking was good, the best winter fishing for whitefish coming from Pigeon and Cold lakes. The bulk of the tullibee caught was purchased by the Alberta mink and fox farmers for animal food.

WHITEFISH HATCHERY

The season's operations of the whitefish hatchery at Lesser Slave Lake were satisfactory, and a total of 58,850,000 eyed whitefish eggs were planted in the following lakes:

Battle Lake	4,000,000
Beaver Lake	2,000,000
Buck Lake (tp. 46, r 6, w 5 m)	4,000,000
Buck Lake (tp. 65, r 17, w 4 m)	2,000,000
Calling Lake	4,000,000
Christina Lake	2,000,000
Cold Lake	5,000,000
Elinor Lake	1,000,000
Heart Lake	2,000,000
Lac La Biche	4,000,000
Lac La Nonne	4,000,000
Lac Ste. Anne	4,000,000
Mosquito Lake	2,000,000
Muriel Lake	1,000,000
Pigeon Lake	4,000,000
Pinehurst Lake	2,000,000
Touchwood Lake	2,000,000
Wabamun Lake	5,850,000
Winifred Lake	4,000,000
TOTAL	58,850,000

FISH CULTURE

A total of 2,006,900 trout and perch was planted in provincial waters during the period under review. A detailed statement showing the waters which were stocked and the species of fish planted follows:

DISTRIBUTION OF RAINBOW TROUT TO PROVINCIAL WATERS DURING 1941

	Advanced Fry	No. 1 Fingerlings	No. 2 Fingerlings	No. 4 Fingerlings
Beauvois Lake			9,800	
Burnstick Lake		15,000		
Mary Gregg Lake				6,000
Phyllis Lake				50,000
<i>Tributary to Athabaska River:</i>				
Prairie Creek				29,000
Lobstick River				3,000
<i>Tributary to Bow River:</i>				
Ghost Lake		25,000		55,000
Seebe Lake				32,000
Canmore Creek				2,000
Policeman Creek				2,000
Georgia Creek				3,000
Bowfort Creek				1,000
Flat Creek				2,000
Meadow Creek				6,000
Johnson Creek				4,000
South Meadow Creek				2,000
Windy Creek				4,000
Jumping Pound Creek				21,000
Sibbald Creek				4,000
Little Jumping Pound Creek				15,000
Big Hill Creek				6,000
Lagoons at Exshaw				12,000
Gap Lake				30,000
<i>Tributary to Crowsnest River:</i>				
Crowsnest Lake		30,000		
Crowsnest River		10,000	31,000	
Gold Creek			2,650	
No. 1 Creek				1,000
Todd Creek			2,000	
<i>Tributary to Elbow River:</i>				
Elbow River				42,000
Pirmez Creek				23,000
Ford Creek				9,000
Little Elbow River				9,000
Ranger Creek				12,000
Rainy Creek				6,000
Prairie Creek				25,000
Bragg Creek				30,000
Robinson Creek				2,000

	Advanced Fry	No. 1 Fingerlings	No. 2 Fingerlings	No. 4 Fingerlings
<i>Tributary to Highwood River:</i>				
Baker Creek		3,000		
Spalding Creek		2,000		
Miller Creek		3,000		
Greenfeed Creek		5,000		
Pekisko Creek		22,000		
Sullivan Creek		34,700		
High River				23,000
Flat Creek				7,000
<i>Tributary to Kananaskis River:</i>				
Upper Kananaskis Lake	40,000			
Spring Creek No. 3				7,000
Spring Creek No. 23				11,000
Spring Creek No. 29				12,000
Ribbon Creek				10,000
<i>Tributary to McLeod River:</i>				
Thornton Creek		5,000		
Mile 1 and 2 Creeks		5,000		
Sulphur Creek		3,000		
Tye Creek		2,000		
Whitehorse Creek		5,000		
Prospect Creek		5,000		
Cabin Creek		10,000		
McLeod River		15,000		
Wolf Creek				11,500
Trout Creek				25,000
Carrot Creek				7,000
Sundance Creek				4,000
<i>Tributary to North Saskatchewan:</i>				
Modeste Creek				20,000
Poplar Creek				30,000
Wolf Creek				10,000
<i>Tributary to Old Man River:</i>				
Pincher Creek		20,000		
Castle River			20,000	
Carbondale River			15,000	
Racehorse Creek			12,000	
Old Man River			21,000	
Lees Creek			10,000	
<i>Tributary to Red Deer River:</i>				
Blindman River				10,000
West Stoney Creek				15,000
<i>Tributary to Sheep River:</i>				
South Branch Sheep River		28,500		
North Branch Sheep River		4,000		
Fisher Creek		2,500		
<i>Tributary to Waterton River:</i>				
Yarrow Creek		30,000		
Drywood Creek		15,000		
Waterton River		40,000		
<i>Tributary to Willow Creek:</i>				
Burton Creek			5,000	
Brown Creek			5,000	
Trout Creek			5,000	4,000
Lyndon Creek			25,000	
Riley Creek			3,000	
Langford Creek			5,000	
Nelson Creek			5,000	
South Willow Creek			15,000	20,000
North Willow Creek			21,500	20,000
Willow Creek				3,000
Honey Coulee				4,500
<i>Tributary to South Saskatchewan:</i>				
Battle Creek	5,000			
Grayburn Creek	5,000			
TOTALS	50,000	339,700	213,950	701,000

DISTRIBUTION OF YEARLING RAINBOW TROUT

Elbow River	2,000		
Ghost Lake	600		
Seebe Dam	500		
Lagoons at Exshaw	100		
Gap Lake	8,000		
Willow Creek District	1,500		
TOTAL	12,700		

Legal size rainbow trout, tagged Nos. 1 to 100, distributed in various waters..... 100

DISTRIBUTION OF LOCH LEVEN TROUT TO PROVINCIAL WATERS DURING 1941

	No. 1 Fingerlings		No. 1 Fingerlings
<i>Tributary to Clearwater River:</i>		Carr Creek	5,000
North Prairie Creek	20,000	Raven River	10,000
South Prairie Creek	15,000	Bearberry Creek	30,000
Cold Creek	5,000	Dennison Creek	10,000
Moose Creek	5,000	Grant Creek	20,000
Prairie Creek	15,000	Castle Creek	9,000
Alford Creek	60,000	Stever Creek	5,000
Suhr Creek	10,000	Gibson Creek	5,000
Muskeg Creek	20,000	Spring Creek	20,000
<i>Tributary to North Saskatchewan River:</i>		Rose Dame	5,000
Shunda Creek	25,000	Crooked Creek	4,000
Havens Creek	5,000	James River	25,000
Snow Creek	5,000	Blindman River	2,000
Wolf Creek	4,000		
<i>Tributary to Red Deer River:</i>		TOTAL	368,000
North Raven River	25,000		
South Raven River	44,000		

DISTRIBUTION OF SPECKLED TROUT TO PROVINCIAL WATERS DURING 1941

	No. 1 Fingerlings		No. 1 Fingerlings
Whitewood Lake	1,000	Wolf Creek	4,500
<i>Tributary to Lesser Slave Lake:</i>		<i>Tributary to Peace River:</i>	
Marten River	25,000	Harmon River	25,000
Prairie Creek	25,000	<i>Tributary to Pembina River:</i>	
Swan River	25,000	Lobstock River	2,700
<i>Tributary to McLeod River:</i>		<i>Tributary to Wabaman Lake:</i>	
Carrot Creek	4,750	Jackpine Creek	1,000
Sundance Creek	14,000		
Trout Creek	17,000	TOTAL	144,950

DISTRIBUTION OF CUTTHROAT TROUT TO PROVINCIAL WATERS DURING 1941

	Advanced Fry	No. 4 Fingerlings
<i>Tributary to Burnstick Lake</i>	8,500	
<i>Tributary to Kananaskis Lakes:</i>		
Spring Creek No. 46		6,000
TOTALS	8,500	6,000

PERCH DISTRIBUTION DURING 1941

	Size	Number Planted
Chain Lake	3" to 6"	15,000
Chip Lake	3" to 6"	30,000
Dried Meat Lake	3" to 6"	10,000
Gull Lake	3" to 6"	15,000
Hastings Lake	3" to 6"	20,000
Lacombe (Jackfish) Lake	3" to 6"	15,000
Sylvan Lake (3 plantings)	3" to 6"	57,000
TOTAL		162,000

TOTAL DISTRIBUTION

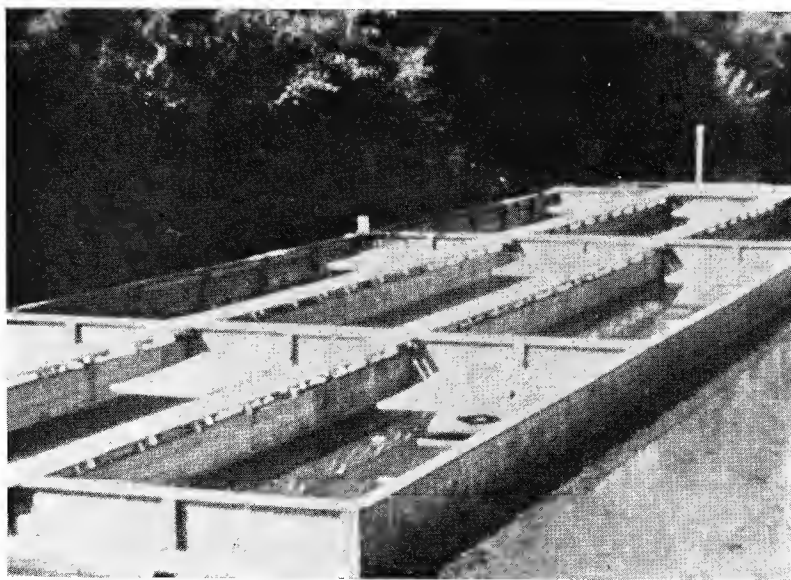
<i>Trout:</i>		
Rainbow Advanced Fry	50,000	
Rainbow, No. 1 Fingerlings	339,700	
Rainbow, No. 2 Fingerlings	213,950	
Rainbow, No. 4 Fingerlings	701,000	
Rainbow, Yearlings	12,700	
Rainbow, Tagged	100	
		1,317,450
Loch Leven, No. 1 Fingerlings		368,000
Speckled, No. 1 Fingerlings		144,950
Cutthroat, Advanced Fry	8,500	
Cutthroat, No. 4 Fingerlings	6,000	
		14,500
Distribution of Trout		1,844,900
Distribution of Perch		162,000
TOTAL		2,006,900

By arrangements with Mr. K. G. Drew, a spawning camp was established at the Kananaskis Lakes and produced satisfactory results. Due to favourable weather and good transportation conditions it was found possible to deliver a number of the eggs in a green condition to the hatchery at Calgary, and the remainder were brought to the eyed stage at the camp. The total number of eggs received by the Department was 337,560 of which 259,060 were rainbow

and 78,500 were cutthroat. It was noted that there was a lack of male fish particularly in the cutthroat variety, with the result that a large number of the cutthroat eggs could not be properly fertilized. The fry hatch from the rainbow eggs was particularly gratifying in that they produced a large and strong species which later developed into rapidly growing fingerlings.

A new feature worthy of note, and which has been of much assistance to the Department, was the establishment of a trout hatchery in the grounds of the Calgary Brewing and Malting Company, Limited, and the construction of a number of rearing ponds in a floral setting. The co-operation of the Company has been greatly appreciated, and the work carried on has been of interest and has proved instructive to many thousands of visitors.

Inglewood rearing ponds were remodelled during the period under review and once again proved very satisfactory.



Trout-rearing Ponds, Inglewood, Calgary

The Claresholm Fish and Game Association and the Cardston Fish and Game Association maintained rearing ponds in their respective localities quite successfully, distribution from the Claresholm ponds being made in the late summer, while the Cardston ponds carried their fingerlings through the winter.

Angling in the Highwood watershed was quite good during the season, but it was noticeable that the average size of the fish taken was smaller than in former years. A number of large fish were taken in the vicinity of High River and also in the waters west of Cataract Creek. Unfavourable water conditions prevailed during the season; the rivers and creeks becoming very low on account of hot and dry weather until the last week of August when wet weather set in. Beaver have increased along the creeks in this district in the last three years and are doing splendid work in the conservation of water on the smaller streams during dry periods.

In the Willow Creek district angling was very satisfactory, especially in the early part of the season.



Eyeing Station, Kananaskis

Pincher Creek and Waterton River districts afforded good sport during the season, though the usual number of anglers in the Waterton district were not apparent.

The Bow and Kananaskis watersheds provided good fishing throughout most of the season and many catches of fine Loch Leven were reported from the district west of Red Deer. Angling in other portions of the province showed little change from former years.

A biological survey of Lesser Slave Lake was undertaken during the period under review by Dr. R. B. Miller of the University of Alberta, and it is expected that this very necessary fact-finding programme will be continued and extended to other waters in the ensuing year.

GAME BRANCH

The year 1941-42 was one of change for the Game Branch. At the beginning of the year the Branch was transferred from the Department of Agriculture to the Department of Lands and Mines, where it had previously been in the year 1936-37 for a period of one year.

Another important change which took effect during the year now under review was the re-writing of The Game Act of 1932 and amendments into the present Game Act of 1941. In revising the act every effort was made to amalgamate the sections dealing with various branches of the work into separate groups. At the same time an attempt was made to simplify and reclassify clauses in the act for the benefit of its enforcement, having in mind difficulties which had arisen from time to time in past years. Particular attention was paid to the defining of certain phraseology or terms which are used in connection with fur, game, fur farming and trapping. There was also an attempt made to simplify, as far as possible, the meaning of the act, so that the general public could become more conversant with the clauses thereof. It was felt that in this

way people would have less opportunity for committing infractions through ignorance as to its meaning.

Some of the principal points which were clarified under the new act are as follows:—

1. The words "close season" and "open season" were defined so that there would be no ambiguity in interpretation.
2. A definition was inserted giving the difference between the term "muskrat den" and the term "muskrat house".
3. A certain amount of leniency was allowed in the hunting of coyotes in order that they may be chased by means of automobiles. The coyote being considered in certain parts of the province as a pest, it was found necessary to supply this means of hunting to assist in the eradication of this animal.
4. Steps were taken to prevent shooting across main and secondary highways as this practice had become a menace to the travelling public.
5. A change was made in the privilege granted to resident farmers, and their shooting of birds without a licence was restricted within certain well defined zones. This led to a more equitable distribution of the available game and simplified enforcement.

When the regulations were drafted under the new Game Act a great deal of care was taken to see that the policy carried out in the preparation of this act should be also followed in the preparation of the regulations. Every effort was made to clarify all points which had from time to time in the past been subject to discussion, and every effort was made to simplify, as much as possible, the interpretation of the regulations and the enforcement of them.

The principal changes in the new regulations are as follows:—

1. The area in Southern Alberta set aside for the shooting of elk was materially increased by including a section of territory from the Carbondale River to the Crowsnest-Macleod branch of the Canadian Pacific Railway.
2. New sections were placed in the regulations to allow for the training of bird dogs, and a new section was also placed in the regulations to allow for the holding of field trials. It was felt that this province should not be behind other provinces in this respect, and that people from outside points should be encouraged to take advantage of the ideal terrain in Alberta with regard to the training of their dogs.
3. In past years a non-resident hunter has been required to pay a fee for the export of game or game heads which he wished to take home with him. It was felt that the large fee required to be paid by these people should include the privilege of taking their trophies home without any extra cost, and the regulations were changed accordingly so that this privilege should be granted.
4. It was found desirable to make a number of changes in the fur farm regulations for the further benefit of this industry.
5. The pheasant had increased during this year to the extent that it was felt that a special permit was not now required for the taking of this bird, and pheasant shooting was included in the game bird licence to avoid extra cost to those persons wishing to hunt this bird.
6. It was found also that the number of elk in the province had increased to the extent that it should not now be necessary to charge an extra fee for the taking of this animal within the two elk areas described in the regulations, and elk are now allowed to be hunted under the general game licence.



Moose at Kananaskis

At the commencement of the year 1941-42 it was decided, as a measure of conservation, that a large portion of the fur bearing part of the province should be organized under a system of trap line and trapping area registrations. For the past seventeen years registration of trapping areas had been in effect on the forest reserves throughout the province and had proved very satisfactory not only from the standpoint of conservation of game but had materially reduced the fire hazard in these areas by making each man morally responsible for fires in his particular trapping area.

For three years prior to this particular season a similar system had been in the process of organization throughout the far northern part of the province, north of the 27th baseline, and here also the good effect obtained was so great as to justify the extension of this system.

The area north of the Brazeau and North Saskatchewan rivers was selected as taking in the greater part of the fur bearing areas within the province, and a system of registration of trap lines in this area was inaugurated. It was felt that the general trapping licence would have to continue for a period of approximately two years to allow for a transition stage from the general trapping licence, which allowed trapping in any territory, to the setting up of registered trap lines, which gave the holder thereof exclusive rights on his own territory. Under this system each area is carefully farmed by the trapper, whereas in the past many areas had been denuded of fur by itinerate trappers who felt that there was little desire to conserve fur with the possibility of having someone else come in on the area and take any surplus which remained. It is expected, as the system comes gradually into force, that the benefits derived by the qualified trapper will be great and the conservation of fur and also of timber resources will be greatly benefited. If the forest cover continues to be burned over vast areas by the carelessness of the itinerate trapper, that section of same on which fur can be propagated will be reduced in fur production by the amount which is burned each year. If the part destroyed by fire can be reduced it stands to reason that an increase in fur will be apparent. Barren areas do not contain game.



Mule deer group at the mouth of the South Kootenay Pass

Another change, and a very important one, which resulted from the transfer of the Fish and Game branches to the Department of Lands and Mines, was the introduction of a closer co-operation between these branches and that of the Forestry Division. It is in the forested areas where game and fur abound, and the protection of game and of forests represent duties which are very similar. Such co-operation resulted in it becoming immediately possible to secure assistance from a large number of forest rangers throughout the foothills, the mountains and the northern part of the province in the supervision of fish and game and the activities resulting from them. It was also found that where a duplication existed in the location of rangers and guardians, it was possible to eliminate these and allow for the spreading of the personnel to cover areas which had heretofore been given little supervision. It was also possible to give intensive supervision to large areas throughout the province, where in the past supervision of any kind had of necessity been somewhat sketchy due to the small number of personnel available to carry on this large task.

At the very commencement of the administration of the Game Branch by this Department it was felt that there should be close association between the Game Branch, the Provincial Fish and Game Association with its affiliated local associations, and with the Zoological Department of the University of Alberta and its very able head, Doctor William Rowan. As the act and regulations were redrafted the Association and Doctor Rowan were consulted from time to time and their able assistance in suggesting ways and means of improving our administration was very much appreciated. These two sources of information were referred to at all times when changes were in prospect with regard to game activities. When those parts of the act and regulations dealing with fur farms were considered, the fur farm organizations were very helpful in assisting in the drafting of certain sections in view of their interest in the proper handling of their affairs by this Department. An expression of appreciation is also extended to the fur dealers for their able assistance in the drafting of that part of the regulations which deals directly with their affairs.

One very important change which took effect in this year was the introduction of a system of sealing beaver pelts. For a number of years a system of stamping beaver pelts had been in effect, but it was found increasingly difficult with the small staff at the disposal of the Game Branch to give service to the vast outlying points of the province where trappers wished to dispose of beaver pelts. A study was made of the subject and it was decided that a seal similar to that used on the railway would give a much more flexible system of handling this very valuable pelt than stamping by hammer. It was felt that the possibility of bootlegging of this fur would be practically eliminated under this system. The seals were carefully marked denoting that they were the property of the Game Branch of the Government and they were serially numbered so that their distribution to various points could be checked against the returns of fur finally coming from these points to the central buying agencies.

The introduction of the sealing of beaver was followed immediately by a closer check on the movement and purchase of fur. It was felt that the trapper and buyer both needed protection and a closer supervision throughout the year did give this protection to both of these parties.

With the transfer of the natural resources to the province in 1931, certain adjustments were made along the boundary between Banff and Jasper Park and the provincial forest reserves. The areas taken from the Park at that time and included within the forest reserves automatically became game preserves under the Game Act. It was found that some of these areas were well defined and the hunting public was able to locate the boundaries and know when they had entered them. There were, however, numerous sections in the back parts of the forest reserves which were not well defined, with the result that hunters were finding themselves accidentally within game preserves by reason of the fact that the areas were not well defined. It was felt, that with the very large natural game preserve in the national parks immediately adjacent to the forest reserves, that it would be possible to eliminate the small areas which were giving trouble and still have an ample supply of game migrating from the national parks.

Pheasants had increased to a large extent in the Brooks area and also, but to a smaller extent, in the area adjacent to the City of Edmonton. It was decided, therefore, that the season on this bird should be extended and the daily bag limit was also extended during this year. The extension, as far as the Brooks area was concerned, was found to have little effect on the pheasant population, and it was found desirable to further extend the season in that area by doubling its length.

The crow and magpie competitions which had been carried on for the past number of years were continued in part. The amount of funds made available for such campaign was limited by reason of the immense increase in the amount of bounty being paid for cougar and wolves. It was, therefore, decided that with the small amount of funds available that the competition should be confined to schools and school children, and this was carried out. It is regrettable that incidents arose in connection with this campaign that will make it necessary to eliminate it in years to come and some other system of eradication of these predatory birds will have to be organized.

Shortly after the beginning of the year discussions were carried on between the Game Branch and the fur farmers organization with a view not only to the setting up of better regulations, but also to obtaining closer supervision of this fast growing industry. An immediate attempt was made by the Department to secure the services of a qualified fur farm inspector. The Department had in mind the selection of a man qualified in the selection of breeding stock, the classification of fur and, at the same time, to be of assistance to the fur farms in their feed problems and be qualified to assist them in any outbreak of disease throughout the industry. It was found impossible, with the funds available, to

interest any person with the necessary qualifications to fill such position, although enquiries were made throughout the entire Dominion. In the meantime, through the assistance of the Provincial Laboratory of the Department of Agriculture and by the supervision of the game officials, the most vital work in this connection was carried on.

A very successful live animal show was held in the City of Calgary during the year at which a large number of competitors showed their stock. This show attracted a great deal of attention, not only from the fur farming industry but from the general public. This was followed a short time later by a very successful pelt show in the City of Edmonton at which it was found that the quality of furs displayed had increased enormously during the past three or four years.



"A Ram with a Background," South Kootenay Pass

Another change which was put into effect in this particular year was the supplying of identification cards to game inspectors and game guardians throughout the province. Prior to this time the game badge had acted as the authority under which the provincial game guardians acted and, in view of the fact that large numbers of these badges had been distributed to voluntary game guardians, who were either inactive or not qualified to act, it was felt necessary that the salaried game guardians should be supplied with identification cards similar to those supplied to R.C.M.P. constables.

Statistical information, relative to the administration of the Game Branch during the period under review, is given as follows:—

CONVICTIONS UNDER THE GAME ACT, JULY 1, 1941 TO JUNE 30, 1942
Number of Convictions 173

CONFISCATED FURS

Amount realized from the sale of confiscated furs, during period April 1, 1941 to March 31, 1942 \$3,031.96

TRAP-LINE REGISTRATION

(April 1, 1941 to March 31, 1942)

Registered Trap-line Certificates issued outside of Forest Reserves, 313 at \$10 each ..	\$3,130.00
Registered Trap-line Certificates issued free of charge to Treaty Indians, 159.	
Registered Trap-line Permits, on Forest Reserves, 131 at \$10.00 each	1,310.00
Registered Trap-line Permits, on Forest Reserves, issued free to Treaty Indians, 23.	
	<u>\$4,440.00</u>

FUR DEALERS' LICENCES, ETC.

(April 1, 1941 to March 31, 1942)

Resident Fur Dealers' Licences, to carry on business in a City and elsewhere than in a City	\$6,390.00
Non-Resident Fur Dealers' Licences, to carry on business in Province:	
9 at \$100.00	900.00
1 at 50.00	50.00
6 at 5.00	30.00
Resident Travelling Fur Purchasing Agent's Licences, 89 at \$25.00	2,225.00
Tanner's Licences, 3 at \$10.00	30.00
Furrier's Licences, 17 at \$10.00	170.00
Resident Travelling Fur Dealers (North of Township 96), 4 at \$15.00	60.00
	<u>\$9,855.00</u>

MUSKRAT AND BEAVER PERMITS ISSUED, SEASON 1941-1942

Muskrat Permits issued	335
Muskrat reported taken	14,217
Beaver Permits issued	195
Beaver reported taken	1,000

BOUNTY ON TIMBER WOLVES, TIMBER WOLF PUPS AND COUGAR

During the period April 1, 1941 to March 31, 1942, the following bounty was paid:	
716 Timber Wolves at \$10.00	\$7,160.00
57 Timber Wolf Pups at \$5.00	285.00
36 Cougars at \$20.00	720.00
	<u>\$8,165.00</u>

AGRICULTURAL PESTS COMPETITION, 1941

Statement as to the result of the competition carried on for the destruction of crows and magpies during the year 1941:

School Children:	
Crows and Magpies	37,772
Crows and Magpies' Eggs	69,613

AMOUNT PAID IN COMPETITIONS

Competition No. 1	\$ 200.00
Competition No. 2	1,000.00
TOTAL	<u>\$1,200.00</u>

FISH AND GAME ADMINISTRATION

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ALBERTA FUR PRODUCTION
Season July 1, 1941 to June 30, 1942

Kind of Fur	Total No. of Pelts	Average Value per pelt	Total Value of Pelts
Badger	5,004	\$ 7.00	\$ 35,028.00
Bear	166	2.00	332.00
Beaver	3,438	24.90	85,606.20
Ermine	526,269	1.30	684,149.70
Fox (Silver)	16,296	23.31	379,859.76
Fox (Cross)	6,567	15.21	99,884.07
Fox (Red)	14,789	10.74	158,833.86
Fox (Blue)	534	16.97	9,061.98
Fox (White)	16	33.43	534.88
Lynx	772	41.43	31,983.96
Mink	76,090	10.13	770,791.70
Muskrat	250,845	2.08	521,757.60
Otter	99	15.75	1,559.25
Rabbit	5,791,077	.08	463,286.16
Skunk	33,269	2.70	89,826.30
Squirrel	4,967,933	.32	1,589,738.56
Wolf (Coyote)	18,763	12.55	235,475.65
Wolf (Timber)	505	7.76	3,918.80
Wolverine	14	10.00	140.00
Fitch	367	1.25	458.75
House Cats	833	.35	291.55
Raccoons	38	3.00	114.00
Wild Cats	2	1.50	3.00
	<u>11,713,686</u>		<u>\$5,162,635.73</u>

FUR FARMS—EXEMPTIONS ISSUED

Fox Silver	15,654	\$ 364,894.74	Muskrat	4,558	\$ 9,480.64
Fox, Cross	1,219	18,540.99	Beaver	68	1,693.20
Fox, Red	573	6,154.02	Rabbit	2,215	177.20
Fox, Blue	532	9,028.04	Nutria	81	40.50
Fitch	170	212.50			
Mink	71,752	726,847.76		<u>97,130</u>	<u>\$1,140,934.99</u>
Coyote	308	3,865.40			
Number of fur-producing animals killed for pelts					97,130

FUR FARMS—NUMBER OF ANIMALS

Pelt Valuation			Pelt Valuation		
Silver Fox	20,982	\$ 488,880.60	Muskats	5,469	\$ 11,375.52
Fox, Cross	1,535	23,332.00	Beaver	334	8,350.00
Fox, Red	688	7,568.00	Rabbit	2,686	174.88
Fox, Blue	653	11,101.00	Nutria	206	216.30
Fitch	381	476.25	Marten	66	2,640.00
Mink	100,488	1,017,943.45	Lynx	4	180.00
Raccoon	28	70.00			
Coyote	72	900.00		<u>133,600</u>	<u>\$1,573,248.00</u>
Badger	8	40.00			

LICENSED ALBERTA FUR FARMERS, SEASON 1941-42

Fox Farms	305	Nutria	16
Mink	831	Marten	2
Muskrat and Beaver	18	Lynx	1
Fitch	17		
Raccoon	3	Number of Licensed Fur Farmers ...	<u>1,195</u>
Badger	2		

Mining Lands Administration

REPORT OF THE SUPERINTENDENT OF MINING LANDS, J. W. HAMILTON

A marked increase was shown in production of coal and petroleum for the calendar year of 1941 over the previous year. The output of coal exceeded that of last year by almost 765,000 tons and the increase in petroleum was more than 1,400,000 barrels.

Production totals of Alberta's minerals secured during the calendar year 1941 were as follows:—coal, 6,970,064 tons; petroleum, 9,908,643 barrels; natural gas, 28,305,429 thousands of cubic feet; salt, 16,610 tons; sodium sulphate, 8 tons; cement, 492,515 barrels; lime, 17,950 tons; sand and gravel, 956,484 tons; stone, 7,942 tons; gold, 215 fine ounces and silver, 21 fine ounces.

The total value of the minerals produced was \$37,283,093 of which coal was valued at \$19,337,420; petroleum, \$13,809,708; natural gas, *\$1,415,271; salt, \$166,100; sodium sulphate, \$32; clay products, \$952,144; cement, \$985,030; lime, \$151,296; sand and gravel, \$433,504; stone, \$24,303; gold, \$8,277 and silver, \$8.

Mineral rights, solid, liquid and gaseous, the property of the Crown in the right of the province, are not sold but are disposed of by lease, reservation, permit or grant for limited periods of time. The Division is responsible for the administration of regulations governing these rights on both provincial and school lands. Revenue is obtained from fees, rentals, bonuses and royalties and during the fiscal year a total of \$1,209,643.06 was received.

Considerable activity was again shown under the regulations governing the reservation of petroleum and natural gas rights for geological and/or geophysical examination, including any investigation relating to subsurface geology, and during this fiscal year more than 4,000,000 acres were granted under reservation. Before commencing or undertaking any geophysical operations, or the examination of the subsurface geology, in the province, a licence must be procured from this Division at a fee of \$25.00. The regulations governing these licences were established on the 28th day of May, 1941, by Order in Council, No. 727-41, and during the balance of the fiscal year 12 licences were issued.

The holder of each petroleum and natural gas lease on which a well had not been drilled was notified by letter, dated August 23, 1941, that machinery and equipment suitable for carrying on drilling operations must be upon the lands included in the lease on or before the first day of September, 1942, and that the drilling of a well thereon must be commenced by that date for the recovery of oil or natural gas. Where a lessee held more than one petroleum and natural gas lease, and proposed commencing drilling before September 1, 1942, he was permitted to consolidate for operation and expenditure and to install machinery and equipment on one or more of the locations included in such consolidation.

During the year 440 applications for mineral rights were made at the offices of the Mining Recorders at Edmonton, Calgary and Peace River which required the preparation of a similar number of files in the Division. Several inquiries were made daily as to the availability of mineral rights, mostly for petroleum and natural gas leases or reservations, by personal application at the office or by correspondence. The Division dispatched a total of 22,535 letters during the year under review.

*Based on well-head valuation of 5 cents per Mcf.

The natural resources of Alberta were transferred from the Dominion Government to the control of the Government of Alberta on October 1st, 1930, and the following tabulation shows the numbers and acreages of the various leases issued from that date to March 31st, 1942:

Type of Lease	Active at date of transfer	Issued	Reinstated	Divided	Cancelled	Renewed	Active at March 31st, 1942
Petroleum and natural gas	18,863	9,300	91	366	25,230	177	3,213
Petroleum and natural gas, crown reserve	5	20	...	...	25	...	...
Coal, provincial lands	620	429	2	4	591	150	314
Coal, school lands	60	27	1	...	55	7	26
Quarrying	45	61	...	...	50	...	56
Quartz mining	4	...	...	...	...	...	...
Salt	1	1	...	...	1	...	1
Bituminous sands	4	2	...	...	4	...	2
Miscellaneous	1	3	...	...	1	...	3
Dredging	32	8	...	...	40	...	...
TOTALS	19,635	9,851	94	370	25,997	334	3,619

ACREAGE CONTAINED IN ABOVE LEASES

Type of Lease	Active at date of transfer	Issued	Reinstated	Cancelled	Renewed	Active at March 31st, 1942
Petroleum and natural gas	2,454,802	1,863,145	18,122	3,591,861	22,697	721,511
Petroleum and natural gas, crown reserve	6,160	22,561	...	28,721	...	...
Coal, provincial lands	236,984	128,950	85	177,103	89,208	99,708
Coal, school lands	9,570	2,473	53	6,117	1,464	4,515
Quarrying	1,675	633	...	1,044	...	1,264
Quartz mining	182	...	...	...	...	182
Salt	200	6,721	...	200	...	6,721
Bituminous sands	3,952	2,063	...	5,451	...	564
Miscellaneous	3,560	323	...	10	...	3,873
TOTALS	2,717,085	2,026,869	18,260	3,810,507	113,369	838,338
Dredging (in miles)	145	24	...	169	...	...

STATEMENT OF BUSINESS TRANSACTED, 1941-42—PETROLEUM AND NATURAL GAS

	Number	Acres
Leases issued	307	67,502
Leases cancelled and relinquished	1,124	258,094
Leases reinstated	32	5,924
Reservations granted	68	4,058,116
Reservations cancelled and relinquished	26	935,821
Fees, rentals and bonuses collected		\$214,519.16
Royalties collected		658,898.75
TOTAL		\$873,417.91

COAL

	Number	Acres
Leases issued on provincial lands	66	15,042
Leases cancelled and relinquished on provincial lands	44	4,064
Leases reinstated on provincial lands	1	45
Leases issued on school lands	1	40
Leases cancelled and relinquished on school lands	1	20
Domestic permits issued	22	...
Fees and rentals collected		\$ 84,830.31
Royalties collected		239,627.78
TOTAL		\$324,458.09

QUARRYING

	Number	Acres
Leases issued	8	50
Leases cancelled and relinquished	2	38
Sand, stone and gravel permits issued	29	...
Fees and rentals collected		\$1,412.99
Royalties collected		3,498.58
TOTAL		\$4,911.57

MISCELLANEOUS

	Number
Bituminous sands leases issued .....	....
Bituminous sands leases cancelled .....	....
Permits to collect bitumen issued	2
Alkali permits issued	1
Quartz mining claims granted	11
Quartz mining certificates of work issued	1
Powers of Attorney (quartz) filed	2
Placer claims granted	26
Powers of Attorney (placer) filed	1
Bar-digging permits issued .....	....
Salt leases issued .....	....
Geophysical licences issued	12
Fees, rentals and royalties collected	\$6,855.49

ASSIGNMENTS REGISTERED, 1941-42

Nature	Number
Petroleum and natural gas	336
Coal, provincial lands	23
Coal, school lands .....	....
Quarrying	3
TOTAL	362

PETROLEUM AND NATURAL GAS

Development of Leases.—The regulations provide that approved expenditures incurred in actual development of petroleum and natural gas rights, acquired under lease or reservation, may be accepted in satisfaction of rentals which otherwise would be payable in cash. During the fiscal year under review, rentals due the province amounting to \$303,629.22 were satisfied from such expenditures and so reduced the revenue of the Division by that amount. The total revenue received in cash for fees, rentals and bonuses was \$214,519.16 which, added to the expenditures accepted in lieu of rentals, makes a total of \$518,148.38.

Disposal by Public Tender.—Bonuses amounting to \$1,038.50 were accepted during the fiscal year at sales by public tender of petroleum and natural gas rights formerly comprised in cancelled leases or reservations.

Number and Area of Leases. — New regulations were established by Order in Council dated the 26th day of August, 1941, and numbered O.C. 1213-41, governing the disposal of petroleum and natural gas rights in provincial lands, including those lands of a class designated school lands, and, as a consequence, school lands are now administered under the same regulations as provincial lands.

During the year 307 petroleum and natural gas leases were issued covering an area of 67,502 acres and at the close of the fiscal year a total of 3,213 leases were active containing an area of 721,511 acres.

Reservations.—There was considerable activity under the regulations governing the reservation of petroleum and natural gas rights, the property of the Crown, for geological and/or geophysical examination, including any investigation relating to sub-surface geology. Sixty-eight reservations were granted in this fiscal year covering an area of 4,058,116 acres and twenty-six reservations were cancelled containing an area of 935,821 acres leaving at the close of the fiscal year 3,681,415 acres still under reservation.

COAL

New coal leases may be granted either for the extension of existing operations or for small mines where the local market cannot be economically supplied from operating mines in the vicinity. In the fiscal year, 67 leases were issued containing 15,082 acres, being made up of new, substitutional and renewal leases. There are now 340 active leases comprising 104,223 acres.

During the current fiscal year the following quantity of coal, subject to Crown royalty, was mined:—

	Tons
Provincial lands' leases	3,013,633
School lands' leases	478,126
Coal lands' and mineral sales	990,257
TOTAL	4,482,016

Crown royalties collected on coal mined in Alberta since April 1st, 1907, are as follows:—

CROWN ROYALTIES COLLECTED ON COAL

Fiscal Year	Royalty Paid	Fiscal Year	Royalty Paid
1907-08	\$ 7,621.67	1920-21	\$ 190,545.80
1908-09	5,322.39	1921-22	185,436.88
1909-10	153,559.98	1922-23	171,723.83
1910-11	218,932.88	1923-24	210,389.53
1911-12	104,894.55	1924-25	148,979.10
1912-13	142,997.79	1925-26	188,277.94
1913-14	147,198.75	1926-27	218,150.10
1914-15	104,489.77	1927-28	231,757.96
1915-16	67,190.17	1928-29	254,616.27
1916-17	149,447.82	1929-30	248,083.71
1917-18	144,634.75	1930-31 (First half) *	90,052.07
1918-19	175,687.66		
1919-20	181,641.80		\$3,741,633.17
		Provincial Lands	School Lands
1930-31 (Last half) *		\$105,126.51	\$ 5,014.29
1931-32		145,170.33	6,354.09
1932-33		143,800.01	4,971.78
1933-34		193,527.82	9,520.13
1934-35		176,122.43	12,365.39
1935-36		186,691.23	19,779.76
1936-37		175,214.33	18,596.00
1937-38		158,227.11	15,159.15
1938-39		143,070.78	9,270.23
1939-40		168,802.75	7,812.78
1940-41		200,045.68	15,841.24
1941-42		216,777.95	22,849.83
TOTAL			\$5,901,744.77

*Date of transfer of Alberta's natural resources from federal to provincial control, and date also of the creation of the Department of Lands and Mines, Alberta, October 1st, 1930.

Permits for Domestic Use.—Permits to mine coal on provincial lands by strip-mining methods for domestic use may be issued to actual settlers on payment of a fee of one dollar and royalty at the rate of ten cents a ton. Each permit expires on March 31st following its date of issue. During the year 22 permits were issued authorizing an extraction of 489 tons, none of which could be bartered or sold.

QUARRYING

Three quarrying leases were issued on surveyed lands containing an area of 50 acres and five leases were issued during the fiscal year for removing gravel from the bed of the North Saskatchewan River. Extraction of 245,471 cubic yards of sand, gravel, limestone and shale from provincial lands was reported for the calendar year of 1941.

At the close of the fiscal year, 56 leases were active containing an area of 1,264 acres.

Permits.—Sand, stone and gravel permits are issued on the beds of rivers and lakes at a fee of \$2.50 and a royalty of five cents a cubic yard and expire on the 30th day of November following the date of issue. In this fiscal year 29 permits were issued for the extraction of 15,695 cubic yards.

DREDGING

The two dredging leases issued the previous year on the bed of the Athabaska River in townships 63 and 64, range 3, west of the 5th meridian were cancelled and no new leases were issued.

QUARTZ

Eleven new claims were recorded during the fiscal year in unsurveyed territory in township 14, range 3, west of the 5th meridian. The claim in the Drumheller district for the recovery of bentonite was renewed and royalty of \$126.72 was paid on this claim representing $2\frac{1}{2}\%$ of the value of the bentonite recovered.

The four quartz leases covering 181.8 acres issued by the Department of the Interior are still active.

PLACER

Activity along the Athabaska River in townships 63 and 64, range 3, west of the 5th meridian, continued during the year and 18 grants were issued for staked claims. Eight other grants were issued, six along the McLeod River, one on the North Saskatchewan River and one in the Grande Prairie District. Recovery of 16.5 ounces of gold was reported during the year.

BITUMINOUS SANDS

Two leases are active at present in the McMurray area containing an area of 564 acres and two separation plants are experimenting on areas held under special development agreements. Abasand Oils Limited treated 21,731 tons extracting therefrom 19,519 barrels of crude oil, 4,190 barrels of Diesel oil and 1,142 barrels of gasoline.

SODIUM CHLORIDE (Common Salt)

This fiscal year the salt plant, operated by Industrial Minerals Limited, reported extraction of 19,015 tons of salt on which royalty at the rate of twenty cents a ton was collected. This plant is located on the lease issued in 1937 covering 6,720.82 acres.

MISCELLANEOUS LEASES

One lease for the removal of sodium sulphate (glauber salts) occurring in comparatively pure condition in sloughs and shallow lakes was cancelled leaving one still active covering an area of 22.5 acres. Production of sixteen tons was reported for the fiscal year.

SPECIAL PERMITS

The two annual permits for the collection of bitumen issuing from old wells in the Peace River District were again renewed. Collection of 977 gallons was reported during the year.

PETROLEUM AND NATURAL GAS

DRILLING ACTIVITY AND STATISTICAL DATA

(Development in 1941-42)

Petroleum production for the fiscal year 1941-42 totalled 10,167,836 barrels, showing an increase of 996,905 barrels over that of the previous fiscal year.

The following is a review of drilling activity and statistical data covering this period.

TURNER VALLEY COMPLETIONS DURING THE YEAR

Arranged by date of reaching final depth

Well	Location	Depth	Date Started	Drilling Finished
	West of 5 M			
Calmont Northwest 3	* 4 of 18, 19-2	8060'	Nov. 17, 1940	Apr. 9, 1941
Regal 1	14 of 24, 19-3	8270'	Sept. 18, 1940	Apr. 9, 1941
Foothills 8	12 of 27, 20-3	8273'	Nov. 18, 1940	Apr. 16, 1941
Northwest Hudson's Bay 5	11 of 8, 18-2	8487'	Oct. 27, 1940	Apr. 27, 1941
Southwest 5	2 of 8, 19-2	6955'	Jan. 11, 1941	May 2, 1941
Lion Sunray 1	8 of 13, 19-3	8267'	Aug. 29, 1938	May 14, 1941
Major Oil Investments 1	5 of 34, 20-3	7593'	Sept. 11, 1940	May 16, 1941

Royalite 55	7 of 7, 19-2	7643'	Jan. 27, 1941.....	May 20, 1941
Atlas 1	1 of 24, 19-3	8074'	Oct. 30, 1940.....	May 21, 1941
Twin Valley 2	10 of 13, 19-3	8470'	Dec. 11, 1940.....	May 25, 1941
Harris 3	16 of 3, 20-3	8927'	Oct. 3, 1940.....	June 1, 1941
Anglo Canadian 9	14 of 7, 19-2	7589'	Dec. 8, 1940.....	June 7, 1941
British Alberta Brown 2,.....	2 of 24, 19-3	8395'	Dec. 12, 1940.....	June 14, 1941
Royalite 47	15 of 15, 20-3	8826'	Dec. 19, 1940.....	June 22, 1941
Home Millarville 7	14 of 33, 20-3	8630'	Dec. 6, 1940.....	June 23, 1941
Royalite 56	12 of 14, 20-3	7912'	Feb. 14, 1941.....	June 30, 1941
Home Millarville 8	16 of 15, 20-3	8441'	Dec. 16, 1940.....	July 5, 1941
British Alberta Brown 1.....	14 of 13, 19-3	8634'	Nov. 18, 1940.....	July 18, 1941
Miracle Royalties 1	3 of 4, 21-3	8010'	Oct. 14, 1940.....	July 31, 1941
Empress 1	5 of 2, 20-3	8787'	Nov. 14, 1940.....	Aug. 5, 1941
Calmont Northwest 4	2 of 18, 19-2	7268'	April 16, 1941.....	Aug. 15, 1941
Royalite 57	2 of 7, 19-2	7765'	May 7, 1941.....	Aug. 18, 1941
Royalite-Model 1	1 of 22, 20-3	7623'	April 22, 1941.....	Aug. 19, 1941
Argus 2	3 of 25, 19-3	7858'	Mar. 26, 1941.....	Aug. 22, 1941
Ace Royalties 1	5 of 4, 21-3	8834'	Jan. 12, 1941.....	Sept. 4, 1941
Royalite 59	15 of 7, 19-2	7313'	May 26, 1941.....	Sept. 8, 1941
Renown 1	8 of 24, 19-3	7969'	Mar. 4, 1941.....	Sept. 12, 1941
Major Oil Investments 2.....	12 of 4, 21-3	8311'	Jan. 29, 1941.....	Sept. 12, 1941
Northwest Hudson's Bay 6 ...	7 of 8, 18-2	8235'	May 2, 1941.....	Sept. 20, 1941
Home Millarville 9	9 of 15, 20-3	8478'	Mar. 30, 1941.....	Oct. 1, 1941
Okalta 11	10 of 24, 19-3	8220'	Feb. 6, 1941.....	Oct. 7, 1941
Alberta Pacific Royalties 1....	14 of 6, 19-2	8334'	Mar. 17, 1941.....	Oct. 14, 1941
Major Oil Investments 3.....	1 of 8, 21-3	8120'	Jan. 14, 1941.....	Oct. 15, 1941
Drillers & Producers 1.....	13 of 7, 19-2	8042'	April 26, 1941.....	Oct. 28, 1941
Royalite 58	7 of 22, 20-3	7787'	June 27, 1941.....	Nov. 13, 1941
United B.A. #1	16 of 12, 19-3	8418'	May 10, 1941.....	Nov. 19, 1941
Royalite 60	5 of 14, 20-3	8216'	July 5, 1941.....	Dec. 7, 1941
Southwest 6	5 of 8, 19-2	7000'	Aug. 23, 1941.....	Dec. 7, 1941
Royalite 61	5 of 19, 19-2	7540'	Sept. 6, 1941.....	Dec. 22, 1941
Major Oil Investments 4.....	8 of 8, 21-3	7836'	May 30, 1941.....	Jan. 13, 1942
Foothills 10	2 of 4, 21-3	8069'	Aug. 25, 1941.....	Jan. 19, 1942
Drillers & Producers 3	3 of 7, 19-2	8152'	July 21, 1941.....	Jan. 19, 1942
Atlas British Dominion 2	4 of 17, 21-3	8710'	Mar. 5, 1941.....	Feb. 1, 1942
Anglo Canadian 11	5 of 25, 19-3	8119'	Aug. 23, 1941.....	Feb. 2, 1942
Miracle Royalties 2	6 of 4, 21-3	7753'	Sept. 3, 1941.....	Feb. 14, 1942
Foothills 11	11 of 4, 21-3	7422'	Sept. 28, 1941.....	Feb. 23, 1942
Royalite 62	3 of 22, 20-3	8990'	Sept. 14, 1941.....	Feb. 26, 1942
Southwest 7	13 of 8, 19-2	6940'	Dec. 12, 1941.....	Mar. 31, 1942

*Note:—Legal sub-division 4 of section 18, township 19, range 2.



EAST FLANK OUTCROP IN AREA NORTH OF TURNER VALLEY

Photo by H. Pollard, Calgary



DRILLING IN AREA NORTH OF TURNER VALLEY

Photo by H. Pollard, Calgary

DRILLING ACTIVITY OUTSIDE TURNER VALLEY

Dina Field.—Dina Omega 1—in 14 of 9, 45-1 W.4, was drilled to 1710' without obtaining production of oil or gas.

Dina Omega 2—in 12 of 9, 45-1 W.4, was drilled to 1981' without obtaining production of oil or gas.

Princess Field.—Anaconda Patricia—in 9 of 31, 20-12 W.4, was drilled to 4029' and abandoned.

Anglo Canadian 3—in 5 of 18, 20-11 W.4, was drilled to 4001' and abandoned.

Standard Oil of British Columbia 2—in 3 of 13, 20-12 W.4; this well completed during previous fiscal year, was reworked to exclude gas and water and considerable oil was produced.

Standard Oil of British Columbia 3—in 5 of 13, 20-12 W.4; this well was reworked and some oil was produced, but increasing water made it necessary to suspend production.

Standard Oil of British Columbia 4—in 13 of 12, 20-12 W.4, continued drilling to 3300' and was plugged back to 3185' and completed as a gas well.

Standard Oil of British Columbia 5—in 9 of 14, 20-12 W.4, was drilled to 3301' and abandoned.

Standard Oil of British Columbia 6—in 5 of 27, 20-12 W.4, was drilled to 3190' and abandoned after testing.

Standard Oil of British Columbia-McDougall Segur 1—in 3 of 11, 20-12 W.4, was drilled to 4077' and abandoned.

Standard Oil of British Columbia-Outer Rainy Hill 1—in 1 of 23, 18-11 W.4, was drilled to 3405' and abandoned.

Vermilion Field.—Acme 1—in 5 of 20, 50-5 W.4, drilled in 1940, was reworked and abandoned.

Acme 2—in 6 of 20, 50-5 W.4, reworked and placed on production as an oil well.

Acme 4—in 6 of 20, 50-5 W.4, was drilled to 1837' with indications of oil and testing was in progress.

Alberta Southern 1—in 15 of 20, 50-5 W.4, resumed operations, drilled to 1794' with testing in progress.

Anglo Canadian, Cummings 1—in 6 of 22, 48-7 W.4, was drilled to 2376' and abandoned.

Anglo Claysmore 1—in 15 of 28, 49-7 W.4, was drilled to 2279' and abandoned.

Conestoga 1—in 1 of 30, 50-5 W.4, actually drilled in previous year to 1861', was placed on production as an oil well.

Flobell 1—in 12 of 29, 50-5 W.4, was drilled to 1819' and was testing.

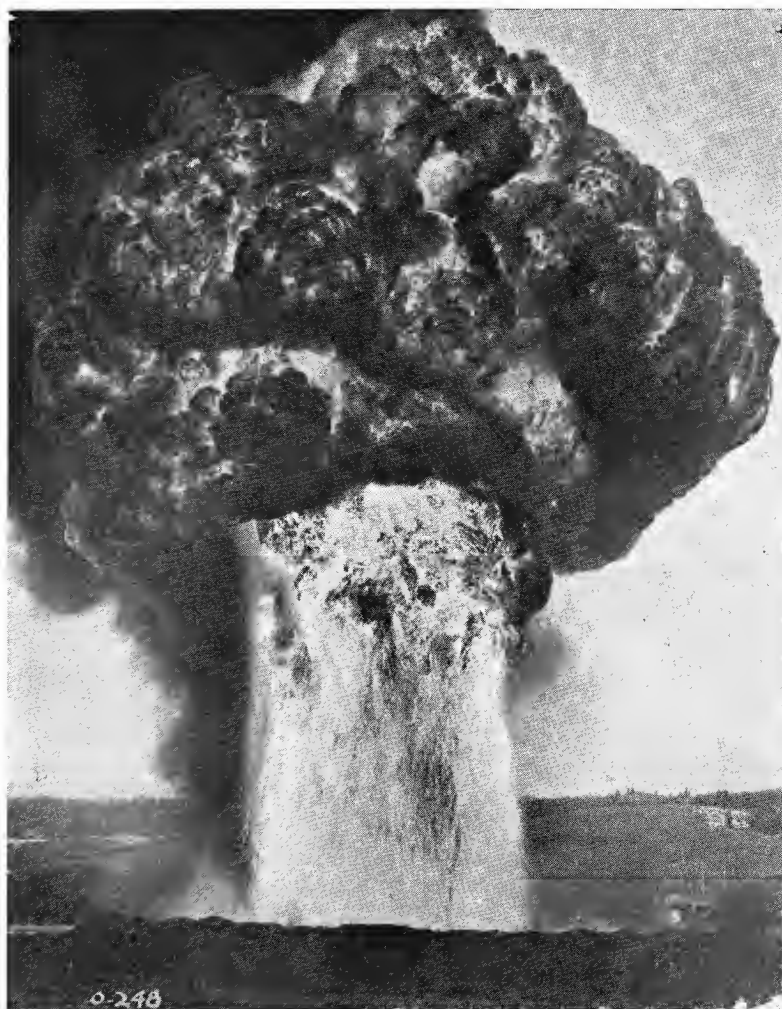
Midfield Petroleum 1—in 16 of 14, 50-6 W.4, started drilling and suspended at shallow depth.

Princeville 2—in 1 of 31, 50-5 W.4, was drilled to 1792' and completed as an oil well. This well produces more gas with oil than is usual in this field.

Richardson G. A.—in 14 of 20, 50-5 W.4, was reworked and placed on production.

Vermilion Consolidated Oils Limited, took over a number of completed and partly completed wells.

V.C.O. 1, name changed from Graham Shane—in 1 of 14, 49-6 W.4; during the year a pipe line was laid to supply the town of Vermilion with gas.



MAJOR 4 BLOWS IN

Photo by H. Pollard, Calgary

V.C.O. 2—name changed from Graham Norton 1.

V.C.O. 3—name changed from Franco Battleview 3.

V.C.O. 4—name changed from Battleview Oils 1.

V.C.O. 5, name changed from Franco Dalton 1—in 12 of 25, 50-6 W.4, was plugged back from 2305' to about 1810' and tested with a small indication of oil and considerable salt water.

V.C.O. 6, name changed from Franco Hamers 1—in 16 of 19, 50-5, W.4, was tested with negative results.

V.C.O. 7, name changed from Franco Hamers 2—in 9 of 19, 50-5 W.4, was partially tested and a little oil was recovered.

V.C.O. 8, name changed from Franco Hamers 3—in 8 of 19, 50-5 W.4, was drilled to 1830' and completed as an oil well.

V.C.O. 9, name changed from Franco Hamers 4—in 15 of 19, 50-5 W.4, was drilled to 1846' and testing was not complete but there were indications of oil.

V.C.O. 10—in 13 of 36, 49-6 W.4, was drilled to 1998', no oil was obtained but possibility to develop gas.

V.C.O. 11—name changed from Pacalta Battleview 1.

V.C.O. 12—in 3 of 23, 49-6 W.4, was drilled to 1874' without obtaining production.

V.C.O. 13—in 16 of 19, 50-5 W.4, was drilled to 1863' and testing was not completed during the fiscal year.

Western Battleview 2—in 9 of 30, 50-5 W.4, was drilled to 1853' and completed as an oil well.

Western Battleview 3—in 4 of 29, 48-5 W.4, was drilled to 1932', with oil showings; had not been placed on production at end of fiscal year.

Western Battleview 4—in 16 of 18, 51-5 W.4, was drilled to 1744', with some showings of oil and gas, but not in condition to produce oil at end of fiscal year.

Wainwright Field.—Montreal-Alberta 1—in 2 of 15, 45-7 W.4, only a little work was done during the year, bottom at 4653'.

Bragg Creek Area.—Dome Oils 2—in 1 of 17, 22-6 W.5, started a diamond drill test but was unable to get below 71' because of loose gravel.

Dome Oils 3—in 8 of 17, 22-6, W.5; a diamond drill test was started late in 1941, drilling was proceeding below 1100' at end of fiscal year.

Brazeau Area.—Ram River 2—in unsurveyed territory in about 8 of 2, 37-11 W.5, resumed operations, reached a depth of nearly 3900' during fiscal year.

Brooks-Tilley Area.—Canadian Western Natural Gas 7—in 16 of 20, 18-14 W.4, was drilled by Northwest Company as oil prospect to 3399' and plugged back 1504' for completion as gas well.

Northwest Tilley 1—in 1 of 18, 17-12 W.4, was drilled to 3208' and abandoned.

Northwest Tilley 2—in 4 of 17, 17-12 W.4, was drilled to 3185', with discovery of oil and testing was proceeding.

Bruderheim Area.—Clonmel 1—in 4 of 32, 55-20 W.4, was drilled to about 1000' and operations were continuing.

Ghost River Area.—Grease Creek 2—in 7 of 13, 29-7 W.5, was drilled to 7506' and abandoned on obtaining unfavourable geological information.

Keho Area.—Keho Dome 1—in 3 of 18, 11-22 W.4, was drilled to 3025' and suspended for casing.



NORTH TURNER VALLEY

Photo by H. Pollard, Calgary



TURNER VALLEY TOWNSITE LOOKING NORTH

Photo by H. Pollard, Calgary

Kinsella Gas Field.—Pipe line from this field was laid to connect with line from Viking to Edmonton and 5 wells were drilled during year and all obtained a good supply of gas.

Northwestern Utilities 3—in 15 of 25, 47-11 W.4, depth 2209'.

Northwestern Utilities 4—in 5 of 35, 47-11, W.4, depth 2180'.

Northwestern Utilities 5—in 4 of 34, 47-11 W.4, depth 2171'.

Northwestern Utilities 6—in 16 of 33, 47-11 W.4, depth 2168'.

Northwestern Utilities 7—in 13 of 33, 47-11 W.4, depth 2208'.

Lacombe-Red Deer Area.—Lacombe-Red Deer 1—in 3 of 13, 40-26 W.4; a licence to drill was obtained and derrick was erected.

Lethbridge Area.—Lethbridge Petroleum and Refineries 1—in 12 of 11, 8-22, W.4, was drilled to 4378', with some showings of water, gas and oil, and abandoned after testing.

Northwest Company, Treaty 1—in 4 of 17, 8-23 W.4 (survey of Blood Reserve), was drilled to 6074' and abandoned after finding showings of oil which were not commercial.

Lundbreck Area.—Maxmont-Lundbreck 1—in 10 of 20, 9-2 W.5, continued operations and reached a depth of about 9300' and drilling continued.

Medicine Hat Area.—Medicine Hat 60—in 16 of 12, 13-6 W.4, was drilled by the City of Medicine Hat to 1118' and completed as a gas well.

Monitor Area.—McColl Frontenac 4-5-32-4—in 4 of 5, 32-4 W.4, was drilled to 3803' and abandoned.

Oyen Area.—McColl Frontenac 16-17-29-5—in 16 of 17, 29-5 W.4, was drilled to 1485' and operations were continuing at end of fiscal year.

Standard Oil of British Columbia 1—in 16 of 34, 26-5 W.4, was drilled to 4100' and abandoned.

Pouce Coupe Area.—Guardian 1—in 7 of 7, 80-12 W.6, continued drilling to 6898'.

Spring Coulee Area.—Del Bonita Associated 3—in 9 of 10, 2-20 W.4, re-worked and made partial test.

McIntyre Ranch 1—in 11 of 24, 3-22 W.4, was drilled to 982' and failed to get local gas supply.

McIntyre Ranch 2—in 11 of 24, 3-22 W.4, was drilled to 650' obtaining a little gas.

Terminal 2—in 13 of 18, 1-21 W.4, abandoned after attempting to rework.

Western Drilling, Twin River 1—in 16 of 3, 2-20 W.4, was drilled to 3969' and plugged back to 3964', produced a little oil.

Suffield Area.—Dept. of National Defence drilled 3 wells to supply gas requirements.

Dept. of National Defence 1—in 5 of 22, 15-9 W.4, depth 1122'.

Dept. of National Defence 2—in 13 of 15, 15-9 W.4, depth 1119'.

Dept. of National Defence 3—in 13 of 22, 15-9 W.4, depth 1137'.

Sundre Area.—Clear Oils 1—in unsurveyed territory about 8 of 2, 35-10 W.5, continued drilling to 3004' and a partial test made.

Taber Area.—Noble 1—in 14 of 33, 8-17 W.4, started drilling and suspended at a depth of 215'.

Willow Creek Area.—Oilfield Development 1—in 7 of 7, 13-2 W.5, resumed operations and drilled to 2535'; suspended.

Royal Sun 1—in 2 of 17, 13-3 W.5, diamond drill test; drilled to 400' with operations continuing.



LITTLE CHICAGO, TURNER VALLEY

Photo by H. Pollard, Calgary

DRILLING PROGRESS

Following the headings first used in year ending March 31st, 1941 report, drilling for oil and gas during 1941-42 is reported as in the table below. In reading the table it should be borne in mind that the basis of its preparation is to include footage made in all wells drilling in the province, regardless of whether they were completed during the period or not. This practice is made possible by the fact that all subsurface operations are reported to one central authority, and because of this the figures reflect the activity at time reported. In many United States statistics, only completions are considered, and total footage for the completed well appears in the period of completion, whereas much of the drilling may have been done previously. By the same token, much of the footage reported for Turner Valley would under the United States practice be considered "wildcat", or exploratory, in that wells have been drilled outside of proven areas.

During the fiscal year, the following footage was drilled:

	DEVELOPMENT			Exploration	Total
	Turner Valley	Other Oil Fields	Gas Fields		
April-June	104,792	14,090	8,688	8,502	136,072
July-September	83,180	14,575	4,600	9,309	111,664
October-December	88,858	15,054	2,835	22,607	129,354
January-March	116,270	9,784	.....	12,985	139,039
TOTALS	393,100	53,503	16,123	53,403	516,129

OIL PRODUCTION IN ALBERTA

Fiscal year, 1941-42

	No. of Wells	Barrels	Value of Sales
Turner Valley, oil wells, separators	*183	9,743,502	\$14,052,582
Turner Valley, gas wells, separators	42	22,426	46,400
Turner Valley, natural gasoline, plants .....	...	305,665	659,248
Turner Valley, shallow crude	3	5,842	9,397
Turner Valley Total.....	228	10,077,435	\$14,767,627
Red Coulee	7	11,363	8,202
Wainwright	6	12,896	8,977
Vermilion	8	29,143	18,352
Princess (2 wells, did not produce in March of 1942).....	...	20,094	17,093
Miscellaneous	4	16,905	12,360
TOTAL.....	†253	10,167,836	\$14,832,611

*Not including wells which were known to produce only gas

†Total number of wells producing as of March 1942

GAS WITHDRAWALS FROM TURNER VALLEY IN Mcf.

	During Year	To End of March, 1942
Gas Cap	16,698,452	1,063,730,452
Oil Zone	36,656,131	125,700,131
TOTAL.....	53,354,583	1,189,430,583
Gas Wasted	32,784,579	963,109,579

PRODUCTION AND DISTRIBUTION OF ALBERTA CRUDE PETROLEUM

Calendar Year 1941

(Quantities in barrels)

Production—	
Light crude (24° and over)	9,578,427
Heavy crude (under 24°)	37,094
Natural gasoline	293,122
Total Production	9,908,643
Distribution—	
Alberta refinery runs	5,012,610
Exports from Alberta	4,963,193
Losses and adjustments	38,499
Total Distribution	10,016,302
Withdrawals from Storage	107,659
Total Production	9,908,643
Storage beginning	455,791
Storage end	348,132

OIL USED IN ALBERTA IN 1941

(Quantities in barrels)

Supply: Refinery runs—	
Alberta crude oil	5,012,610
Imported oil	11,919
Less refining and other losses, production of non-taxable products, exempt sales, fluctuation in unfinished stocks	5,024,529
Refinery production of taxable petroleum products	1,396,468
Imports of taxable petroleum products from U.S.A. and other provinces	3,628,061
Imports of taxable petroleum products from U.S.A. and other provinces	156,166
Total supply of taxable petroleum products	3,784,227
Distribution—	
Sales in Alberta	2,854,920
Shipments to other provinces	931,425
Total Distribution	3,786,345
Deduct withdrawals from storage	2,118
Total New Supply.....	3,784,227
Storage, white products, beginning	660,905
Storage, white products, end	658,787

These tables of production and distribution of crude petroleum and oil used in the province are prepared from data that are more nearly complete than similar tables previously published.

GAS CONSUMPTION IN ALBERTA, 1941-42

	No. of Wells	Thousands of Cubic Feet
Calgary-Lethbridge System—		
From Foremost—to Gas Company	3	126,490
From Turner Valley	245	
Gas Company		8,050,943
Imperial Refinery		918,825
Bow Island Town		40,630
Field fuel		12,039,019
		21,049,417
Wainwright—		
Town supply	5	91,837
Field fuel		11,165
		103,002
Edmonton and towns—		
From Viking	14	2,528,573
From Kinsella	6	2,023,591
		4,552,164
Vermilion—		
Town supply	1	39,181
Medicine Hat—		
City system	22	1,632,345
Industries	11	1,053,415
		2,685,760
Redcliff—		
Domestic	4	64,950
Industries	7	643,373
		708,323
Brooks	6	56,487
Miscellaneous	4	164,747
TOTAL	*328	29,485,571
Waste, Turner Valley		32,784,579
Waste, other field and miscellaneous		211,997
TOTAL natural gas production		62,482,147

*Includes only wells believed to be in use during the year.

There are additional wells of value as standby to distribution systems, and a number of wells each serving a single consumer. Some other wells doubtless might be used when connected to a distribution system, but in absence of such connection, their condition and state of reserves are so little known as to make definite statements undesirable.

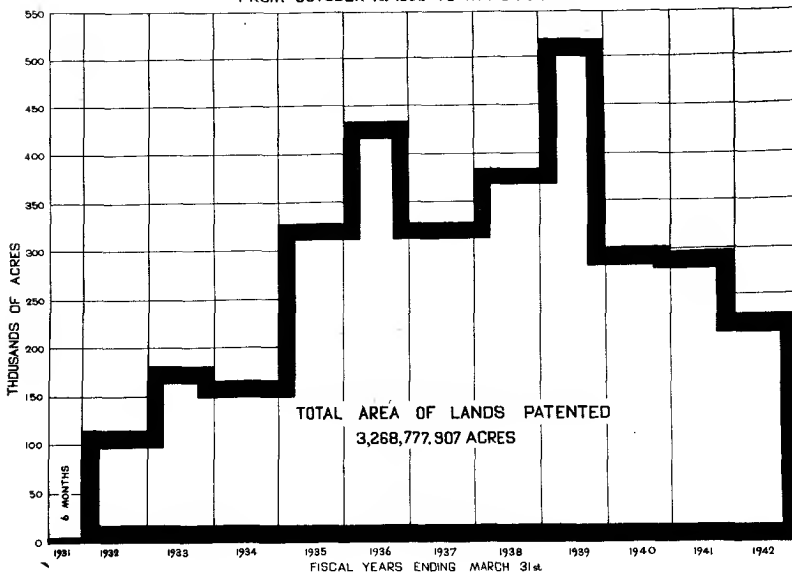
Technical Division

REPORT OF THE SUPERINTENDENT OF THE TECHNICAL DIVISION, T. W. DALKIN

Notifications (Land Patents).—More than twice the number of acres were patented in the peak year ending March 31st, 1939, than in the present year under review, ending March 31st, 1942. This year's total amounts to 229,566,606 acres and 35 subdivision lots covered by 1,563 notifications, particulars of which are as follows:—

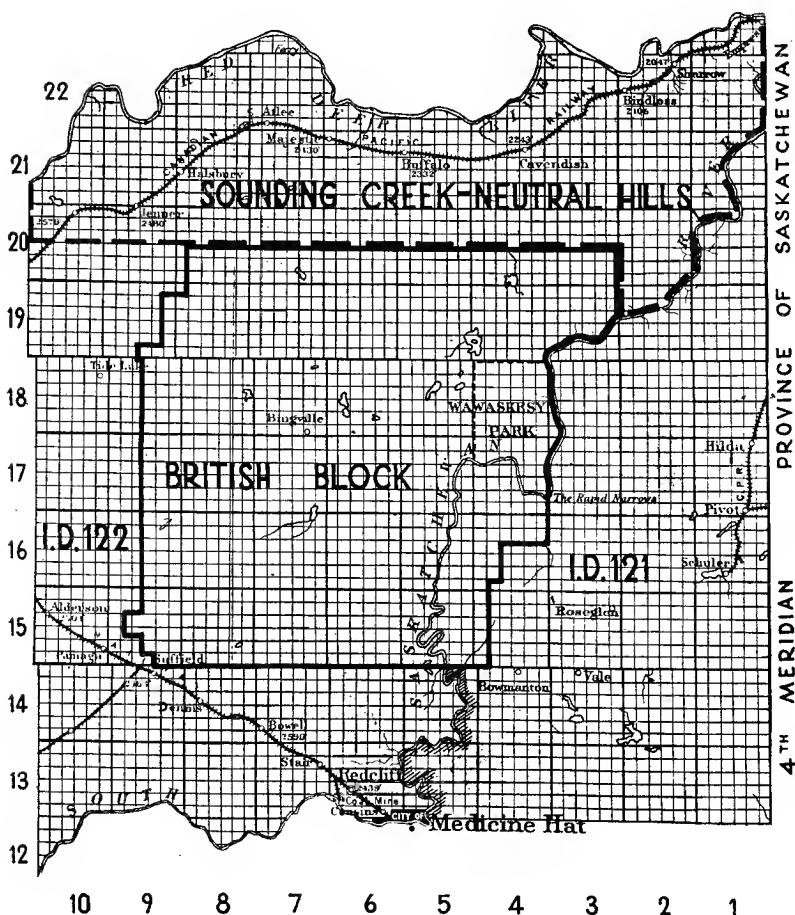
Classification	Notification	Area (Acres)
Homesteads	1,066	165,717.846
Sales (including lots in subdivisions)	84	4,140.85
Second homesteads	258	39,172.58
Soldier grants	23	3,624.41
Special grants	26	982.12
School lands' grants	3	7.00
School lands' sales	64	9,813.46
Pre-emption sales	2	318.00
Exchanges of land	5	643.00
Exchanges of land (Special Areas)	13	3,034.83
Revivals of title	6	1,401.16
Certificates of tax sale redemption	4	641.00
Canadian Pacific Railway Company grants	1	25.03
Northern Alberta Railways Company grants	1	34.91
Northern Alberta Railways Company sales	1	3.53
Canadian Northern Western Railway Company sales (Special Areas)	1	1.93
Grand Trunk Pacific Railway Company grants	1	.....
Grand Trunk Pacific Railway Company sales	1	3.21
Canadian Northern Railway Company sales (Special Areas)	3	1.74
TOTALS.....	1,563	229,566.606

CHART SHOWING ACRES PATENTED
FROM OCTOBER 1st 1930 TO MARCH 31st 1942



Map
Showing
**PRESENT DISPOSITION of FORMER
 TILLEY EAST SPECIAL AREA**

Scale  10 Miles



Details of sales in subdivisions which are included in the 84 notifications referred to above:

	Notifications	No of Lots
Maple Leaf, Plan 7242 AI	2	3
Canmore, Plan 39 Gen.	5	6
Patricia Townsite, Plan 1217 BA	2	2
Coleman, Plan 6808 CU	1	1
Maple Leaf, Plan 6632 Y	1	1
McMurray, Plan 616 AO	1	5
Richdale, Plan 6978 AW	1	1
Prairie River, Plan 7652 BG	1	1
Winnifred, Plan 5265 AD	1	1
Peace River Landing Settlement, Plan 5617 BK	1	2
Donnelly, Plan 204 CL	1	1
Jarvie, Plan 37 Gen.	2	2
McMurray Settlement, Plan 198 AS	1	1
Hanna, Plan 6133 AW	1	2
Walsh, Plan 3644 B	1	2
Bodo, Plan 5201 EO	1	1
Buffalo, Plan 1345 BA	1	2
Scapa, Plan 8731 DL	1	1
TOTALS	25	35
School lands' sales included in the 64 notifications referred to above:		
McLennan Townsite, Plan 1394 EU	2	2
Special grant included in the 26 notifications referred to above:		
Carbondale, Plan 232 AI	1	2

Change in Policy.—Patents and notifications have heretofore been sent by the dominion and provincial governments to the registrars and at the same time the patentee was advised. Where fees were required for the registration of these documents the registrar notified the owner of the land. During the course of many years a large number of patents and notifications have remained in the Land Titles Office unregistered, due to the failure of the prospective owners to send in the registration fee. In consultation with the registrars, a change in policy has now been adopted whereby the registrar's fee is now collected by this Department and transmitted to him with the notification, so that no notification is issued until the registration fee is received, thus ensuring its registration when forwarding it to the Land Titles Office.

Special Areas.—News that the Dominion Government had selected about thirty townships of land in the Tilley East just north of Medicine Hat for a bombing area and for other experimental purposes in connection with the war caused great excitement among the residents, who, in some cases, did not altogether like the idea of being moved from their land, in spite of the fact that the area had for many years yielded only a bare existence.

It should be recorded that all other areas in the province, and also other provinces, had been investigated by the Department of National Defence and finally this one was settled upon because the least number of families would be disturbed. Most of the lands which were held by the Crown were fairly level, tree-less and located close to railway and power supplies. They were generally useless for agriculture.

In May, 1941, Colonel Goodwin Gibson arrived in Edmonton with his associates to start proceedings for taking over on behalf of the Dominion Government the area which has since been commonly known as the British Block. Anticipating his arrival, abstracts of all patented lands in the Block were obtained and the facilities and help of this division were immediately made available to set up complete records of all ownerships.

Each owner's record showed upon a special form the lands held under title, the lands held under lease from the Crown and also grazing allotments, etc. A complete financial statement was also given showing details of all encumbrances including mortgages, liens, relief received, arrears of rentals and so forth, and a separate plan was prepared showing the holdings in detail. This work was

accomplished by searching every quarter section by order of township and range, after which the various holdings of each owner were sorted out and put into a folder in alphabetical order.

With this complete record the Commission set out for Medicine Hat where, through the courtesy of the Department of Public Works, offices were provided in the Court House, in order that each owner could appear before this Commission and submit a claim for compensation. It is generally known that all liens up to and including the year 1935 affecting lands in the Special Areas were cancelled in full by the Provincial Government, and, as a further concession to all owners in the British Block, whose compensation amounted to less than \$1,500.00, agricultural relief liens under the 1936, 1937 and 1938 advances were withdrawn in as far as the lands were affected in the British Block.

Telephone calls, telegrams and communications were received daily from this Commission and the Dominion Government's legal representatives in Medicine Hat, who were also furnished with abstracts and various other detailed information covering the lands, whose owners were seeking compensation, and all inquiries were given immediate attention in order to assist the Dominion Government in the settlement of compensation without delay.

When all encumbrances are cleared from the lands in the British Block it is the intention of the Province of Alberta to lease this area to the Dominion Government.

The lands that have for so many years been known as the Tilley East are, therefore, no more, at least in name, for a glance at the map hereunder will show that it has been completely disposed of by the creation of the British Block under Order In Council, No. 645/41, dated the 13th of May, 1941. Order In Council, No. 644/41, passed on the same date, deleted certain lands which are now included in I.D. 121 and I.D. 122. The balance of the Tilley East still remains in the Special Areas, but by Order In Council, No. 901/41, dated the 2nd of July, 1941, is incorporated with and known as the Sounding Creek-Neutral Hills Special Area.

It will be noticed from the list of notifications issued that 13 were involved in connection with exchanges of land in the Special Areas. These exchanges were briefly referred to in last year's report. The main object is to consolidate the residents' holdings into one economic unit. The benefits, however, are two-fold in that the land transferred to the Government also helps in many cases to consolidate the lands held by the Crown thereby affording better administration in the elimination of isolated, privately-owned lands.

The main attributing factor to the delay in affecting these exchanges has been the badly encumbered state of the applicants' titled lands, and as many Dominion Government liens appeared among these encumbrances, discharges of these and all other indebtedness had to be obtained so that clear titles could issue in the name of the Crown. After the registration of the notifications covering the Crown lands to the applicants the amount of provincial indebtedness was registered as a charge against the new titles. As a departmental policy, exchanges are restricted to the lands within the Special Areas, and it is only in extenuating circumstances that exchanges are considered outside the Special Areas.

Through requests received from time to time by the Director of Surveys of the Department of Public Works, it was ascertained that 26 road diversions were scheduled for survey. As some of these requests were of long standing it was deemed advisable to investigate the necessity of these surveys as due to ever-changing conditions in the Special Areas, many of the roadways may not have been required. The result was that only 4 road surveys were made affecting mostly C.P.R. and Hudson's Bay lands.

The Special Areas Board now has made application, to be affected by Ministerial Order under Section 14 of the Special Areas Act, for the closing of all roads, trails and bridges to public travel or use, except certain specified roadways which are required for the economic life and administration of the areas.

Three small areas were sold and notifications were issued in favour of the Canadian Northern Railway Company. These areas were required for the erection of snow fences and located in the following quarter sections:—

S.w. $\frac{1}{4}$ 7-28-2-W. 4th Mer., containing 0.44 of an acre,
S.e. $\frac{1}{4}$ 22-30-11-W. 4th Mer., containing 0.61 of an acre,
S.w. $\frac{1}{4}$ 16-28-5-W. 4th Mer., containing 0.69 of an acre.

The Canadian Northern Western Railway Company purchased 1.93 acres, more or less, in the n.w. $\frac{1}{4}$ 25-22-12 w 4th mer., which area is now being used as a right of way for a wye at Wardlow.

In recognition of the elimination of the Tilley East Special Area and the new boundaries at present established, it is found that the following areas have been acquired by the Crown:—

By tax recovery	1,871,906 acres
By revestment	75,380 acres
TOTAL.....	1,947,286 acres

The 1,871,906 acres include 135,783.59 acres of tax recovery lands that were acquired by the Crown during this fiscal year.

At this point it may be interesting to submit the area of lands that the province has acquired outside the Special Areas, which is as follows:—

By tax recovery	610,180 acres
By revestment	417,718 acres
TOTAL.....	1,027,898 acres

Total area of land acquired by the province since the return of the natural resources:—

Inside Special Areas	1,947,286 acres
Outside Special Areas	1,027,898 acres
TOTAL.....	2,975,184 acres

Reference to the chart in this report will reveal that a total area of 3,268,778 acres has been patented, and taking into consideration the amount of lands acquired by the province through tax recovery and revestment, the figures show an actual loss to the province of only 293,594 acres. The term "by revestment" covers all lands transferred to the province excepting those transferred through tax recovery proceedings. For instance, lands transferred to the province by the Dominion Government, lands transferred to the province in exchange for other lands, Soldier Settlement lands and any other lands that are transferred through any cause to the Crown, are classified as revested lands.

New Surveys.—Due to a change in the course of the right bank of the Red Deer River at Drumheller, the city made application to acquire a certain area of the former bed of the river which adjoined an island already patented in that city's name. This necessitated a new survey which incorporated the island and the bed of the river. The city transferred the island back to the Crown in return for which a notification was issued to the city covering the island and the land now connecting it to the mainland. The city council defrayed all expenses in connection with this survey and transfer. It was brought to the attention of the Department that certain squatters had taken up residence on legal subdivisions 10 and 15 of section 11, township 29, range 20, west of the 4th meridian, which is Crown land and is already under lease from the Department. Following the policy of clearing up such squatter situations, wherever possible, a survey was ordered of the land occupied by each squatter, plans of survey prepared and squatter permits issued to each.

Due to the recession of the waters of Gap Lake in the south-east quarter of section 19 and the south-west quarter of section 20, township 24, range 9,

west of the 5th meridian, a resurvey was made in order to deal with an application for a tourist camp site. This is an ideal location for a commercial venture of this kind, and is situated immediately south of and adjoining the Banff highway midway between Exshaw and Canmore. The access road leading from the cabins to the highway was not all that could be desired from a safety point of view, but through the co-operation of the Department of Public Works this has now been remedied.

Reference was made in last year's report to a completed survey near the south approach on Twelfth Street to St. George's Island Bridge in Calgary. It was discovered that a portion of the accrued area fell within the limits of the right of way of the Canadian National Railway. This matter was brought to the attention of the railway authorities with the result that a free grant was issued in the name of the Grand Trunk Pacific Railway Company. This grant appears in the preceding list of notifications, against which no area is shown as it was described as Block A., according to registered plan No. 2336 F.A.

Townships 66 and 67, range 2, west of the 5th meridian and township 69, range 26, west of the 5th meridian: A supply of lithographed maps of the surveys of these townships (which surveys were made last year) has been received from Ottawa and released for distribution. Receipt of the plans of survey of townships 66 and 67, above described, near Tieland, permitted the registration of a notification in favour of the Northern Alberta Railways Company for right of way containing 34.91 acres, through the east half of section 35, and south-west quarter of section 36, township 66, range 2, west of the 5th meridian, and through the east half of section 2 and the east half of section 11, township 67, range 2, west of the 5th meridian, being a free grant and in accordance with the agreement covering the sale of the railways from the Provincial Government to the railway company. Additional lands were required by this railway company in the north-east quarter of section 11, township 67, range 2, west of the 5th meridian, which were disposed of by sale in the usual way.

Roadways.—Eighty-nine survey plans of roadways approved by the Director of Surveys, Department of Public Works, were received and recorded in this Division. These plans affected 296 parcels of Crown land throughout the province. The usual reservations were entered in the Division's records and in cases where the lands were alienated by agreement for sale or lease, etc., assignments were obtained and compensation credited to the purchasers or licensees as the case may be.

Licences of Occupation.—Logging Roads: A wartime boom in the lumber industry was reflected in the applications for logging roads and resulted in licences of occupation being issued to the following companies:—

Etter-McDougall Sawmills Limited (2 logging roads)
Chisholm Sawmills Limited (2 logging roads)
McRae Lumber Company Limited
Messrs. F. W. and A. A. Steffes

Other licences of occupation issued for power transmission line and pipe-lines to the Northwestern Utilities Limited (two pipe-lines), The East Kootenay Power Company, Limited, and The Canadian Western Natural Gas, Light, Heat and Power Company, Limited.

In accordance with the agreement of the province in connection with the sale of the railways, three licences of occupation were issued in favour of the Northern Alberta Railways Company for bridge sites at the following locations:—

N.e. $\frac{1}{4}$ 11-78-5-W. 6th mer.—over Bremner Creek,
S.w. $\frac{1}{4}$ 29-76-5-W. 6th mer.—over Burnt River,
N.w. $\frac{1}{4}$ 25-77-8-W. 4th mer.—over Christina River,
S.e. $\frac{1}{4}$ 22-71-1-W. 5th mer.—over Athabaska River,
S. $\frac{1}{2}$ 16-59-2-W. 5th mer.—over Pembina River,
N.e. $\frac{1}{4}$ 35-77-24-W. 5th mer.—over Smoky River.
Between river lots 16 and 41, township 78, range 5, west of the 6th meridian—over Spirit River,
River lots 48 and 55, township 77, range 5, west of the 6th meridian—over Bremner Creek,
S.e. $\frac{1}{4}$ 13-66-15-W. 4th mer.—over Missawawi Lake.

Leases.—Various leases of a miscellaneous nature were issued for recreational grounds, fur farming, gardening and residential purposes, one of the most northerly being issued to the Governor and Company of Adventurers of England Trading into Hudson's Bay, covering 8.25 acres, more or less, in an unsurveyed portion of township 89, range 4, west of the 5th meridian. This area was required as a site for a trading post and allied purposes.

Soil Surveys.—The following areas were covered by the soil survey party of the Division:—

1	NITON-CARROT CREEK AREA		
	Township 53—range	9—w	5th meridian,
Part only	township 53—range	10—w	5th meridian,
Part only	township 53—range	11—w	5th meridian,
Part only	township 53—range	12—w	5th meridian,
Part only	township 52—range	13—w	5th meridian,
	Township 53—range	13—w	5th meridian,
Part only	township 53—range	14—w	5th meridian,
Part only	township 54—range	12—w	5th meridian.
2	ATHABASKA-LAC LA BICHE AREA		
	Part only township 67—range	15—w	4th meridian,
	Part only township 68—range	16—w	4th meridian,
	Part only township 67—range	16—w	4th meridian,
	Township 68—range	17—w	4th meridian,
Part only	township 67—range	17—w	4th meridian,
	Township 68—range	18—w	4th meridian,
	Township 67—range	18—w	4th meridian,
	Township 66—range	18—w	4th meridian,
	Township 68—range	19—w	4th meridian,
	Township 67—range	19—w	4th meridian,
Part only	township 66—range	19—w	4th meridian,
Part only	township 67—range	20—w	4th meridian,
	Township 66—range	20—w	4th meridian,
Part only	township 68—range	21—w	4th meridian,
Part only	township 67—range	21—w	4th meridian,
	Township 66—range	21—w	4th meridian,
	Township 68—range	22—w	4th meridian,
	Township 67—range	22—w	4th meridian,
	Township 66—range	22—w	4th meridian,
	Township 68—range	23—w	4th meridian,
	Township 67—range	23—w	4th meridian,
	Township 66—range	23—w	4th meridian,
Part only	township 66—range	24—w	4th meridian,
	Township 65—range	24—w	4th meridian.

Operations started on the 21st day of May and the party disbanded on the 9th of September.

This survey was carried out with the object of determining the amount of available vacant Crown lands suitable for farming purposes within the above areas, the regulations governing the issue of agriculture leases being kept in mind. The lands were classified on the following basis:—

- 1 Lands Suitable for Immediate Settlement: These lands include quarter sections with soil suitable for continued crop production. At least 50 per cent of their area must be suitable for cultivation and the cost of bringing them under cultivation must not exceed \$25.00 per acre.
- 2 Lands Unsuitable for Settlement: Lands in this class constitute quarter sections having less than 50 per cent of their area suitable for cultivation, due to poor soil, very rough topography or extreme stoniness.
- 3 Lands Having Potential Value: These are quarter sections which are unsuitable for settlement at the present time, due to muskeg or heavy tree cover, but which may become suitable for cultivation at some future period.

Each quarter section was inspected individually, soil samples being taken at different places over the quarter and classified on the spot, except, of course, where a general reconnaissance showed that certain areas did not merit a detailed survey at the present time due to inaccessibility, poor soil, very rough topography or a preponderance of muskeg.

In addition to the soil classification, the following information was obtained:

- (a) Topography;
- (b) Extent and kind of tree covering;
- (c) Classification of the soil and its suitability for farming purposes;
- (d) Improvements and value, if any;
- (e) Approximate cost of clearing and breaking;
- (f) Number of acres suitable for cultivation;
- (g) The value of the land.

A total of 1,177 quarter sections was inspected and may be classified as follows:—

179 quarters, suitable for immediate settlement,
277 quarters, unsuitable,
721 quarters, potential agricultural lands.

The areas classified were mostly of the 2nd and 3rd class grey wooded type, more suitable for mixed farming than the growing of wheat only. Those quarter sections which have been classified as not suitable at the present time due to heavy clearing or to the presence of muskeg may become suitable for cultivation at some future date, should the trees or muskegs be removed by fire. It should be remembered that a great deal of muskeg land in the province has been brought under cultivation by the burning off of the moss cover and is now producing excellent crops. Unfortunately this practice of burning cannot be generally recommended as a method for reclaiming muskeg land due to the danger to nearby timber stands and neighboring farmsteads.

Soil surveys were carried out on lands for which agricultural lease applications had been received. These surveys and reports were executed as expeditiously as conditions would permit. The majority of applications were for lands which were far from gravelled roads, and weather conditions were in some cases responsible for making the dirt roads impassable, particularly in the Lac La Biche and Buck Lake, west of Breton, districts and districts adjacent to the North Saskatchewan river. In other cases delays were due to the fact that applications would be received in an area just after the Division's inspector had completed all his investigations and was in another part of the province, carrying out his season's programme.

Just over 300 applications for agricultural leases were dealt with and soil surveys of the various quarters gave the following information:—

216 quarters met the requirements of the regulations,
62 quarters were unsuitable at present, but of potential value,
26 quarters were rejected.

During the inspections, general agricultural practice of the district was observed, and, wherever possible, beneficial advice was given to the farmers.

In addition, 12 quarter sections, or fractions thereof, were inspected for miscellaneous leases and some time was spent in Southern Alberta in connection with the proposed grazing reserves in the old Tilley East Special Area and in the Castle River and Burmis districts. A general inspection was also made of the old Cooking Lake Forest Reserve and a valuation placed on the improvements owned by the Blackfoot Stock Association.

Mineral Taxation.—The Mineral Taxation Act of 1941 has been placed under the administration of this Division, and in accordance with same only one area to be classified as producing, has been established so far. This, of course, is in the Turner Valley. New producing areas will be proclaimed from time to time as new oil fields are discovered.

Tax notices were mailed to all the registered owners of the minerals in this producing area in accordance with the final assessment, as revised upon appeal by the Chairman of the Alberta Assessment Commission. In the producing area the rate was struck at 2 mills. In the non-producing area the lands are taxed at the rate of $\frac{1}{2}$ c per acre. In as far as the non-producing area is concerned, an unfortunate feature of the act provides that every owner of minerals shall deliver to the Minister a statement of the parcels taxable under the provisions of this act. This is the reversed procedure to sending out assessment notices. It is, therefore, quite understandable that many owners will fail to comply with the act, due, in many cases, to the fact that the owners of Alberta minerals are living outside of the Dominion and are not, therefore, aware of this provision. Advertisements, however, have appeared in the provincial papers calling attention to the requirements of this act.

In the event of non-payment of these taxes, the Minister shall notify the owner of the fact by sending a registered letter to his address as shown by his certificate of title. The proper administration of this portion of the act is not possible because the Department has no record of the ownerships of the various minerals not included in the non-producing area, which can be obtained only from the registrars of the Land Titles offices. This would involve a great deal of time and work by experienced people familiar with such records. At the present time the staffs of the two offices are unable to cope with any additional work outside of their regular duties. If a complete record of the mineral owners cannot soon be obtained, and it seems most unlikely that it can, then some consideration must be given to amending or revising the Mineral Taxation Act as it is clear that it cannot be successfully administered unless the Department has record of the names and addresses of owners who are subject to taxation.

Duplicating Machine.—The Gestetner Duplicating Machine and its operator have been transferred to this Division. During the year 389 stencils were cut and a total of 136,903 copies were run off. The balance of the operator's time is taken up in stenographic work.

Preservation of Records on Film.—As the Department has been authorized by legislation to record on film any documents of a cancelled transaction, a Recordak Junior has been installed by the Recordak Corporation and was put into service in October of this year.

In connection with the installation of this machine, some idea of its value may be obtained from the following article:—

"Before a bombing plane can be built draftsmen must make 60,000 mechanical drawings. Thirty tons of blueprints must be made before the building of a battleship is completed. In the Library of Congress are copies of nearly 10,000,000 books. In the public and private archives of the nation is stored the recorded knowledge on which the cultural and industrial life of the nation is based.

If enemy bombs should destroy these priceless records, how would we duplicate them? A bombed building can be built up again—but ideas, designs, patents, formulae, masterpieces of architecture, if the paper on which they are recorded is destroyed, may be lost to us forever. Portions could be recaptured only by great expenditure of time and labor.

Today invaluable records of this sort are photographed on microfilm. An entire drawing, even a whole page of newspaper, may be copied on a tiny piece of film no larger than a postage stamp. A novel of over a thousand pages, like "Gone With the Wind," can be copied on a roll of film the size of a five-cent spool of thread.

A plant manufacturing machine tools found itself with 400,000 charts that took up 1,500 square feet of floor space. Every day the number grew. Reduced to microfilm the whole lot could be stored away in two drawers of a letter-file. About 9,000 drawings were duplicated on a reel of film the manager could slip into his pocket or hide away in a safe-deposit vault.

Telephone companies, water companies, gas and electric corporations today are microfilming their records. If a city is bombed, repair crews will know just where to go to repair breaks, even if original engineering plans and records are damaged or lost. Records which must be added to or changed are re-photographed periodically and kept up to date. Some utility companies are doing this every six months.

Banks photograph checks, for a permanent record that can be filed away without taking up room. Letters written by soldiers abroad are microfilmed so that a single air-plane, bound for home, can carry the equivalent of tons of mail. The Army and Navy are making other uses of the film that can't be told until the war is over. Newspapers from 37 countries are now available through Harvard's microfilm subscription service for libraries. All books in the British Museum written before the year 1500 A.D. are being recorded—some 10,000,000 pages in all—in an American sponsored project. No bomb can ever lose their contents to mankind.

The secret of microfilm is an ultra-fine grain emulsion with what photographers call high resolving power and inherent contrast. That is, it can record extremely fine detail—so fine that in reducing a drawing to the size of a pinhead, 1/900th of the original area, and then enlarging it, all of the essential detail is preserved."

Looking forward to an era of progress and reform after the conclusion of this war, it is quite within the range of possibility that this method may be universally adopted throughout all Government departments.

Photostat Machine.—A record year was established in the photostat division where 51 rolls of photostat paper, each 350 feet long, were used. This machine is now practically in continuous operation and its value, judging from the amount of work executed for the various departments, has been definitely established and recognized throughout the service.

In this connection it is interesting to know that a great volume of work was done for the Department of Municipal Affairs in preparing its preliminary material in order to establish larger Municipal District Units. The time at the disposal of this Division was limited and without the photostat machine it would have been impossible to have had the various plans ready for the meetings which had been arranged for the discussion of the proposed new districts.

From time to time assignments have been done for the Department of Geology of the University of Alberta. Dr. Allan is greatly impressed with the ingenuity of this machine, particularly when weeks of work can be saved by the enlargement of fine topographical features.

New Maps.—The new map of the Province of Alberta, the work of this Division, came off the press in October, drawn to a scale of 16 miles to the inch. This fits in to the same scale as the Saskatchewan map, which is a very handy size, measuring 4'4" by 2'6". The map shows all surveyed areas of the province on a blue background, making the names of the cities, towns, villages and post offices, printed in black, very legible. Railways are shown in black and the highways in red. In addition trails, irrigation canals, ferries, railway stations, Hudson's Bay Posts, radio stations, including forestry and commercial, principal airports, forest reserves, national parks and elevations are shown. A new strip map of Turner Valley was drafted, which also included the area north of the Turner Valley field for a distance of about 7 miles in a north-westerly direction.

Maps and Plans.—Apart from the disposal of a large number of maps to the general public and the various Government departments, it was most gratifying to be of assistance to the pilots of the U.S.A. aircraft who refueled their planes in Edmonton on their way to Alaska. The maps mostly in demand by the pilots covered Northern Alberta and British Columbia, Yukon and the North-west Territories.

Changes continued to take place in the personnel of the staff. Eight resignations were accepted during the year, four of which were due to enlistments in the armed forces. The war has made the most inroads on our drafting staff, making it difficult to maintain a high standard of prompt and efficient service. However girls are now successfully employed at the drafting desks and show quite an aptitude for the junior branches of the work.

Dominion Maps.—The new Dominion publications, Whitecourt-Athabaska and Grande Prairie-Peace River, in the National Topographic Series were published, and this Division co-operated with Ottawa in the final check of these maps before they were run off the press.

Grazing Leases.—There was a decided increase in the descriptions of lands for grazing leases, mainly due to the fact that the Special Areas grazing leases, lying within the area withdrawn from the Tilley East Special Area, were converted into provincial lands grazing leases.

Accounting Division

REPORT OF THE ACTING ACCOUNTANT, E. R. EDWARDS

During the year ending March 31, 1942, there was a surplus of \$1,745,929.82 on income account, an increase of \$384,714.29 over the previous year. Included in this year's figures, however, is a surplus of \$121,058.73 on operations of the Game Branch, which was transferred to this Department on April 1, 1941.

Every branch of the Department showed an increase in revenue over the previous year, the most notable being the Mining Lands Branch and the Timber Branch which showed increases of \$127,751.20 and \$120,003.56 respectively. An examination of statement "H" will show the details of increases in all branches. It will be noted from statement "B" that the net revenue on Income Account for the year was \$2,593,485.14, an increase of \$561,990.76.

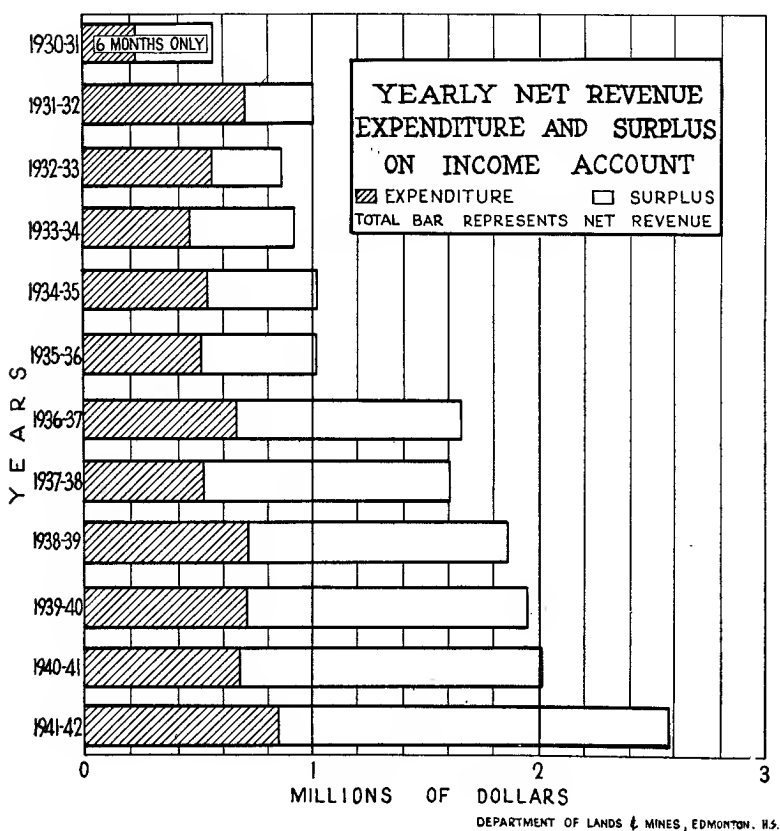
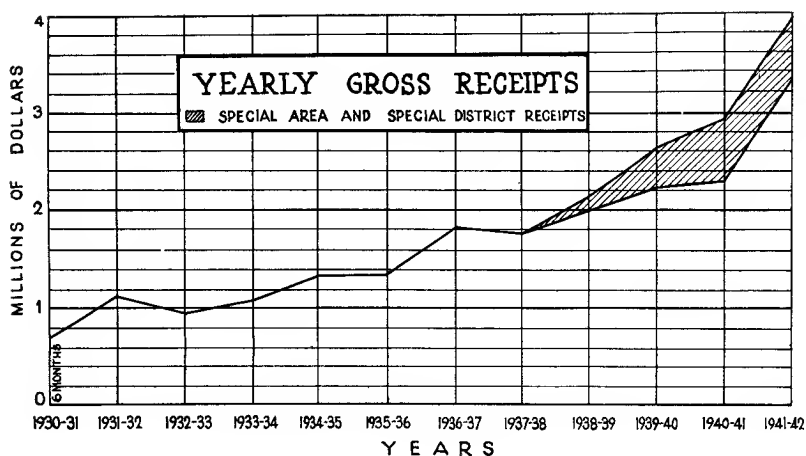
The total expenditure on income account amounted to \$847,555.32. The increase of \$177,276.47 was due to the operational costs of the Fisheries and Game Branches, \$48,969.86 and \$40,063.44, and to a sharp increase of \$98,554.62 in fire-fighting expenses.

Combined collections from Special Areas and Special Districts amounted to \$594,010.46. The decline in collections on Agricultural Relief Advances more than accounts for the total decrease of \$39,734.68. The combined expenditures for this year's operations were \$327,080.62, and were all paid from funds in the Special Areas and Special Districts Trust Accounts. Details will be found in statements "E", "F", and "G".

Since October 1, 1930, when the natural resources of the province came under the control of the Provincial Government, there has been an enormous increase in the volume of cash receipts being handled by this Division. The total cash received from all sources during this fiscal year was \$3,967,861.44, as shown in statement "A". The following graphs are presented to illustrate the growth of gross receipts and the relationship between net revenue and expenditure on income account.

INDEX TO STATEMENTS

- A.—Statement of Receipts from All Sources.
- B.—Statement of Receipts Income Account.
- C.—Statement of Receipts Capital Account.
- D.—Statement of Receipts and Disposition of Agricultural Advances.
- E.—Special Areas Trust Account Statement of Receipts and Payments.
- F.—Special Districts Trust Account Statement of Receipts and Payments.
- G.—Statement of Receipts, Special Areas and Special District.
- H.—Statement of Receipts by Branches.
- I.—Statement of Receipts, School Lands Branch.
- J.—Alberta School Lands Trust Fund Balance Sheet.
- K.—Alberta School Lands Sales Revenue Account.
- L.—Statement of Collections on Tax Recovery Lands.



STATEMENT A.

STATEMENT OF RECEIPTS FROM ALL SOURCES

From April 1, 1941 to March 31, 1942

	Gross Receipts	Refunds	Net Revenue
Income Account	\$2,703,598.18	\$ 110,688.12	\$2,592,910.06
Capital Account	10,486.91	70.00	10,416.91
Reimbursement of Previous Year's Expenditures	7.36	.. ..	7.36
School Lands Trust Fund	127,882.36	8.10	127,874.26
Special Areas and Special Districts	603,750.33	9,739.87	594,010.46
Unapplied Receipts	452,427.78	376,612.40	75,815.38
Tax Recovery	53,600.66	111.84	53,488.82
Improvements	4,405.36	2,189.69	2,215.67
Land patents cultivation crop shares	754.02	.. ..	754.02
School lands cultivation crop shares	6,767.34	.. ..	6,767.34
Grazing permits, fees, rentals, etc.	4,181.14	.. ..	4,181.14
	<u>\$3,967,861.44</u>	<u>\$ 499,420.02</u>	<u>\$3,468,441.42</u>

STATEMENT B.

STATEMENT OF RECEIPTS—INCOME ACCOUNT

From April 1, 1941 to March 31, 1942

INCOME ACCOUNT:	Gross Receipts	Refunds	Net Revenue
<i>Fisheries:</i>			
Casual	\$ 362.74	.....	\$ 362.74
Fisherman's licences	8,995.00	.....	8,995.00
Angling permits	14,650.11	\$ 1,769.26	12,880.85
Boat licences	60.00	.....	60.00
<i>Game Branch:</i>			
Casual	1,622.73	.....	1,622.73
Game licences	80,832.83	5,758.70	75,074.13
Trap line permits	3,129.84	.....	3,129.84
Fur tax	81,587.44	3,322.59	78,264.85
Sale of fur	3,031.96	1.34	3,030.62
<i>Lands and Grazing Branch:</i>			
Casual	8,852.24	327.69	8,524.55
Grazing permits, fees, dues, etc.	142,531.91	22,854.88	119,677.03
Hay permits, fees, dues, etc.	4,284.17	243.50	4,040.67
Agricultural fees, rentals, etc.	1,553.29	235.00	1,318.29
Improvement collection fees	544.54	67.50	477.04
General sales interest	1,800.45	.....	1,800.45
Filing authority fees	2.00	.....	2.00
Cultivation fees, rentals, etc.	11,421.39	3,300.94	8,120.45
Surface rentals	2,020.95	.....	2,020.95
<i>Timber Branch:</i>			
Casual	5,545.52	2.00	5,543.52
Timber fees, dues, rentals, etc.	734,041.42	7,405.54	726,635.88
<i>Mining Lands Branch:</i>			
Casual	11,236.86	.....	11,236.86
Coal fees, rentals, etc.	82,756.69	2,196.25	80,560.44
Coal Mines Act sundry revenue	4,498.86	31.50	4,467.36
Coal royalties	216,786.95	9.00	216,777.95
Petroleum and natural gas fees, rentals, etc.....	196,303.50	6,866.55	189,436.95
Petroleum and natural gas royalties	570,604.94	.....	570,604.94
Mineral Tax	75,120.93	.....	75,120.93
<i>School Lands Branch:</i>			
Interest on sales	99,022.53	149.69	98,872.84
Miscellaneous	324,273.92	55,089.89	269,184.03
<i>Miscellaneous:</i>			
Casual	8,905.13	1,016.30	7,888.83
Services and supplies	6,102.18	.....	6,102.18
Reimbursement of salaries and expenses.....	588.16	.. ..	588.16
Tax recovery office fees	527.00	40.00	487.00
Total (carried to Statement A)	<u>\$2,703,598.18</u>	<u>\$ 110,688.12</u>	<u>\$2,592,910.06</u>
<i>Special Districts (carried to Statement D):</i>			
1936 seed grain interest	123.88	.....	123.88
1939 agricultural advances interest	41.56	.....	41.56
1937-38 feed and fodder interest	285.72	.....	285.72
1938-39 feed and fodder interest	123.92	.....	123.92
TOTAL INCOME ACCOUNT	<u>\$2,704,173.26</u>	<u>\$ 110,688.12</u>	<u>\$2,593,485.14</u>

STATEMENT C.

STATEMENT OF RECEIPTS—CAPITAL ACCOUNT

From April 1, 1941 to March 31, 1942

	Gross Receipts	Refunds	Net Revenue
Land sales principal	\$ 10,486.91	\$ 70.00	\$ 10,416.91

STATEMENT D.

STATEMENT OF RECEIPTS AND DISPOSITION OF AGRICULTURAL ADVANCES

From April 1, 1941 to March 31, 1942

Receipts:		
Gross receipts		\$ 35,856.41
Refunds		20.65

Net to statement G \$ 35,835.76

Disposition:	Principal	Interest	
1937 seed grain	\$ 7,253.88	\$ 1,826.16	to Provincial Treasurer
1936 seed grain	261.93	123.88	to Provincial Treasurer
1939 agricultural advances	353.28	41.56	to Provincial Treasurer
1937-38 feed and fodder	1,804.84	285.72	to Provincial Treasurer
1938-39 feed and fodder	1,221.12	123.92	to Provincial Treasurer
1938 agricultural advances	1,942.70	439.86	to Dept. of Municipal Affairs
1938 agricultural advances	6,544.67	1,218.56	repaid to banks
1938 agricultural advances	10,461.00	1,932.68	to be forwarded to Provincial Treasurer
	<u>\$29,843.42</u>	<u>\$ 5,992.34</u>	
		\$ 29,843.42	
		5,992.34	
		<u>\$ 35,835.76</u>	

STATEMENT E.

STATEMENT OF RECEIPTS AND PAYMENTS

SPECIAL AREAS TRUST ACCOUNT

For the Year Ended March 31, 1942

Cash in bank, March 31, 1941		\$ 34,737.23
Receipts:		
Grazing rentals	\$ 57,783.88	
Cultivation rentals	45,822.88	
Equipment rentals, 1941	21,975.78	
Province of Alberta, equipment grant	10,000.00	
Sale of buildings	8,647.82	
Bank interest	706.64	
Miscellaneous	1,825.56	
		<u>146,762.56</u>
		\$ 181,499.79
Payments:		
Purchase of equipment	\$ 22,478.66	
Equipment maintenance	12,892.98	
Community pastures	7,376.31	
International Business Machine costs	3,711.17	
Special Districts items charged to Special Areas Trust Account	687.24	
Construction of dams	277.75	
Grass seed	1,345.60	
Hay meadows	19.80	
Miscellaneous	756.52	
		<u>49,546.03</u>
Cash in bank, March 31, 1942		<u>\$ 131,953.76</u>

STATEMENT F.

STATEMENT OF RECEIPTS AND PAYMENTS

SPECIAL DISTRICTS TRUST ACCOUNT

For the Year Ended March 31, 1942

Cash in bank, March 31, 1941		\$ 65,368.24
Receipts:		
General tax collections	\$ 359,739.30	
Funds transferred from Municipal Districts Bank Accounts	8,155.47	
Bank interest	530.30	
Reimbursement of Special Areas items charged to Special Districts Trust during year ending March 31, 1941	524.44	
Miscellaneous	7,220.05	
		<u>376,169.56</u>
		\$ 441,537.80

Payments:		
School requisitions, 1941	\$ 101,675.77	
Hospital requisitions, 1941	24,670.06	
Maintenance of roads	49,619.65	
Provincial Mental Hospital	626.50	
Provincial Training School	2,157.10	
Child welfare	127.75	
Direct relief	2,828.39	
Mothers' allowances	5,479.02	
Provincial Treasurer for special administrative services	2,892.06	
Land Titles Office fees	2,522.20	
Pests and weeds	1,213.77	
Buildings	850.00	
Special Areas items charged to Special Districts Trust Account.....	442.20	
Miscellaneous	501.96	
Tilley East collections transferred to Dept. of Municipal Affairs ..	41,713.93	
Liquidation of debentures of former school districts in Special Areas	39,916.16	
Liquidation of liabilities of former municipal districts in Special Areas	298.07	
		277,534.59
Cash in bank, March 31, 1942		\$ 164,003.21

STATEMENT OF RECEIPTS
SPECIAL AREAS AND SPECIAL DISTRICTS
From April 1, 1941 to March 31, 1942

STATEMENT G.

	Gross Receipts	Refunds	Net Revenue
TAXES:			
General Tax—Statement F	\$ 367,328.40	\$ 7,589.10	\$ 359,739.30
Social Service Tax	56,201.92	26.28	56,175.64
Reporting School Tax	8,430.30		8,430.30
Refunded to school districts	\$8,008.74		
5% commission to Special Dis-			
tricts Trust Account	421.56		
Total collections	\$8,430.30		
Hail Tax	3,648.22		3,648.22
Refunded to Hail Board	\$3,465.82		
5% commission to Special Dis-			
tricts Trust Account	182.40		
Total collections	\$3,648.22		
TOTAL TAX COLLECTIONS	\$ 435,608.84	\$ 7,615.38	\$ 427,993.46
Funds transferred from Municipal Districts Bank			
Accounts, Statement F	8,155.47		8,155.47
Special Districts Bank Interest, Statement F	530.30		530.30
Special Districts Miscellaneous, Statement F	6,626.09	10.00	6,616.09
Statement F	\$7,220.05		
Less: Reporting schools commis-			
sions	421.56		
Less: Hail commissions	182.40		
	\$6,6616.09		
Special Areas Trust Receipts	116,880.62	2,093.84	114,786.78
Statement E	\$146,762.56		
Less: Equipment rentals, 1941..	21,975.78		
Less: Province of Alberta Equip-			
ment Grant	10,000.00		
	\$114,786.78		
Agricultural Advances, Statement D	35,856.41	20.65	35,835.76
Collections for Department of Agriculture:			
Horse vaccine	71.00		71.00
Bran and sawdust	21.60		21.60
	\$ 603,750.33	\$ 9,739.87	\$ 594,010.46

DEPARTMENT OF LANDS AND MINES

STATEMENT OF RECEIPTS BY BRANCHES
For Fiscal Years Ending March 31, 1941 and March 31, 1942

STATEMENT H.

	Fiscal year ending March 31, 1941	Fiscal year ending March 31, 1942
INCOME ACCOUNT:		
Fisheries Branch		\$ 22,298.59
Game Branch		161,122.17
Lands and Grazing Branch	125,544.35	145,981.43
Timber Branch	612,175.84	732,179.40
Mining Lands Branch	945,333.30	1,073,084.50
Mineral Tax		75,120.93
School Lands Branch	337,777.81	368,056.87
Miscellaneous	10,665.08	15,066.17
CAPITAL ACCOUNT:		
Land sales principal	9,511.39	10,416.91
TRANSFERRED TO OTHER DEPARTMENTS		
	851.49	7.36
SCHOOL LANDS TRUST FUND	76,589.34	127,874.26
SPECIAL AREAS AND SPECIAL DISTRICTS:		
Taxes	420,874.08	427,993.46
Funds transferred from Improvement Districts Trust Accounts	380.12	
Funds transferred from Municipal Districts Bank Accounts		8,155.47
Special Districts bank interest	182.29	530.30
Special Districts miscellaneous	1,057.18	6,616.09
Special Areas receipts	106,748.30	114,786.78
Agricultural advances	103,907.28	35,835.76
Horse vaccine	553.50	71.00
Bran and sawdust	42.39	21.60
UNAPPLIED RECEIPTS CARRIED FORWARD:		
Suspense	38,035.14	129,304.20
Improvements	2,899.21	2,215.67
Land patents cultivation crop share	1,492.29	754.02
School lands cultivation crop share	33,791.91	6,767.34
Grazing permits, fees, rentals, etc.	25,409.25	4,181.14
	<u>\$2,853,819.54</u>	<u>\$3,468,441.42</u>

STATEMENT OF RECEIPTS
SCHOOL LANDS BRANCH
April 1, 1941 to March 31, 1942

STATEMENT I.

	Receipts	Refunds	Net Revenue
INCOME ACCOUNT:			
Sales: interest	\$ 99,022.53	\$ 149.69	\$ 98,872.84
Grazing fees, rentals, etc.	15,769.61	186.33	15,583.28
Hay fees, dues, etc.	875.25	61.85	813.40
Cultivation fees, rentals, etc.	104,687.05	53,389.99	51,297.06
Surface rentals	116.72		116.72
Miscellaneous leases	279.41		279.41
Timber permits, fees, dues, etc.	59,326.62	880.49	58,446.13
Coal fees, rentals, etc.	4,269.87		4,269.87
Coal royalties	22,849.83		22,849.83
Petroleum and natural gas fees, rentals, etc.	25,894.61	512.40	25,382.21
Petroleum and natural gas royalties	88,293.81		88,293.81
Miscellaneous	1,911.14	58.83	1,852.31
	<u>\$ 423,296.45</u>	<u>\$ 55,239.58</u>	<u>\$ 368,056.87</u>
TRUST ACCOUNT:			
School lands sales principal	127,882.36	8.10	127,874.26
	<u>\$ 551,178.81</u>	<u>\$ 55,247.68</u>	<u>\$ 495,931.13</u>

ALBERTA SCHOOL LANDS TRUST FUND
BALANCE SHEET—MARCH 31, 1942

STATEMENT J.

ASSETS	
Cash in bank and on hand	\$ 20,093.98
Investments:	
Dominion of Canada Debentures	\$10,355,095.91
	<u>10,355,095.91</u>
Accounts Receivable:	
Undue principal	731,311.78
Arrears principal	755,509.87
	<u>1,486,821.65</u>
	<u>\$11,862,011.54</u>
LIABILITIES	
Alberta School Lands Trust Fund	\$11,862,011.54
	<u>\$11,862,011.54</u>

ACCOUNTING DIVISION

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STATEMENT K.

ALBERTA SCHOOL LANDS SALES

REVENUE ACCOUNT

April 1, 1941 to March 31, 1942

Arrears interest as at March 31, 1941	\$ 533,032.57	
Interest charges	114,343.01	
Interest on reinstated accounts	33,042.19	
Interest revenue		\$ 98,872.84
Interest on cancelled sales written off		58,039.30
Amounts transferred from cultivation leases held on reinstated sales		9,393.91
Interest reductions granted by School Lands Board		95,616.72
Arrears interest as at March 31st, 1942		418,495.00
	<u>\$ 680,417.77</u>	<u>\$ 680,417.77</u>

STATEMENT L.

STATEMENT OF COLLECTIONS ON TAX RECOVERY LANDS

April 1, 1941 to March 31, 1942

Grazing permits	\$ 2,304.64
Grazing rentals	4,067.58
Sales principal	1,032.25
Sales interest	16.95
Cultivation permits	85.18
Cultivation rentals	879.38
Wheat acreage bonus	942.01
Cultivation crop shares	5,374.78
Miscellaneous leases	16.27
Miscellaneous sale of improvements	148.34
Sundry revenue	134.71
	<u>\$ 15,002.09</u>
Tax recovery office fees	487.00
	<u>\$ 15,489.09</u>

Special Areas Administration

REPORT OF SPECIAL AREAS BOARD—A. C. McCULLY, Chairman

During the year under review, the following permits were issued:—1,205 provincial lands' grazing permits, covering 523,828 acres; 402 school lands' grazing permits, covering 165,726 acres; 869 provincial lands' cultivation permits, covering 169,229 acres of broken, and 83,879 acres of unbroken land; 226 hay permits, giving authority to cut 2,644 tons of hay. The revenue derived from these sources may be found elsewhere in this report in the Statement of Receipts, Special Areas Trust Account.

Following the policy of issuing new long term leases, 116 applications for twenty year grazing leases and 108 applications for six and twenty year cultivation leases were dealt with. In dealing with applications for long term grazing leases, old allotments and leases were cancelled, and a decided effort was made to re-allocate these, and other available public lands, in such a manner that the lease of each applicant would be in as compact a block as possible, at all times recognizing the necessity of having the same well watered. Arrears were consolidated and spread over varying periods of from ten to twenty years.

As a result of the policy to exchange privately owned lands for more desirable public lands, 41 applications were dealt with. Of this number 30 were recommended, 3 were refused, and 8 held for further investigation.

During the year, 19,740 lbs. of crested wheat grass were harvested from public lands at an average cost of $2\frac{3}{4}$ cents per pound. This includes the cost of harvesting, cleaning and sacking. Of this amount, 3,946 lbs. were returned in payment on seed loaned and crop shares. A total of 1,200 lbs. was received from the Lethbridge Experimental Station under their policy of establishing seed plots. This seed, together with the carry-over from 1940, mentioned in the previous year's report, was distributed to 413 farmers to be seeded on public lands. The practice of loaning seed to be sown on privately owned lands was discontinued. All seed now distributed is sown on public lands. During the year 4,200 lbs. were seeded on road allowances where new grades were built, and 13,952 lbs. were in store on December 31, 1941.

The Prairie Farm Rehabilitation Act again became active and 93 applications for dams and dugouts for stock watering purposes, together with 6 for irrigation projects were given the approval of the Special Areas Board. A total of \$684.50 was expended on repairs to the Sunnynook, Harding, Bartman and Pollockville Community dams.

Ducks Unlimited completed projects on the following locations:—Lake Traung, township 28, range 14; Major's Lake, township 25, range 9; Lost Lemon Lake, township 16, range 17 (Lomond Community Pasture); Edgewood Lake, township 15, range 17 (Lomond Community Pasture)—all west of the 4th meridian. Except in extremely dry periods a permanent water supply will now be assured in each of these districts.

Last year's report showed some 256,000 acres of pasture land as being available to residents of the area in various community pastures. During the year approximately 34,560 acres were withdrawn from two of the pastures. These lands are now included in the National Defence Reserve, known as the British Block. This necessitated the removal of a great deal of fencing, as well as the range riders' buildings and corrals. A further 16,000 acres were withdrawn and leased to private parties. This area was originally in the Cavendish Community

Pasture, but on withdrawal of the portion in the British Block it was decided to abandon this community pasture and include parts of it in the Buffalo Atlee and Bindloss pastures and lease the balance to private parties. A total of 3,054 head was pastured during the season.

The use of these pastures gives residents, who have not sufficient summer grazing close to their home holdings, an opportunity to more fully co-operate with the war effort by reducing wheat acreage and by the raising and feeding of more stock during the winter season.

In order that the fullest co-operation might be given the officials of the Wheat Acreage Reduction Act, the entire time of one clerk was given up in each office of the Board to this work, for a period of six months. In addition to this, the Board's fieldmen spent several weeks taking applications in outlying points. A total of 3,300 applications and 2,866 statements of claim was taken.

In December, 1940, the Board acquired from the dissolved Municipal District of Rosenheim, a Monarch 75 Caterpillar and 42" Austin Elevating Grader. During the winter months this outfit was reconditioned in the Board's Youngstown shop. Road machinery of the Board now consists of four caterpillars, two of which are equipped with bulldozers, two elevating graders, two auto patrols and a number of old style blade graders. During the season these outfits completed 69 miles of high standard elevated grade at an approximate operating cost of \$125.00 per mile; 248 miles of standard blade grade at \$22.00 per mile; 35 miles of light blade grade at \$8.00 per mile. Auto patrols on two occasions covered a distance of 1,874 miles, and on three occasions a distance of 624 miles. The Board's bridge crew, consisting of four men with a truck, built 69 new culverts and bridges and repaired 22.

The amount of \$27,643.87, shown in the Financial Statement as road maintenance, represents payments in cash. In addition to this, roadwork was completed and applied on taxes and relief in the amount of \$9,747.01, or a total of \$37,390.88 was spent on roadwork.

For the past three years the Board has used the workshop on the Agricultural Farm at Youngstown. From time to time equipment has been added until there is now a complete blacksmith outfit, including power drill, grinder, trip hammer and acetylene welding outfit. Machinery is all overhauled in this shop during the winter. Culverts are also built from salvaged lumber, taken from buildings on abandoned lands. These culverts vary in size from 24" to 74" in diameter and 20' to 30' in length. This is considered worthy of mention, as the idea is original. In construction four old car tire rims or tractor wheels of equal size are first selected. These are covered with 2" by 4", 4" by 4" or 6" by 6", according to the size of the culvert. They are bound to the rims with salvaged wire and treated with a mixture of Diesel fuel and Wainwright tar. The rims or wheels are placed on the inside for added strength. A culvert of this design, made from old steam engine wheels, is in fact quite strong enough to be used in a railroad grade.

Statement of receipts and payments are kept under two headings, namely, Special Districts Trust Account, and Special Areas Trust Account. The Special Districts Trust Account represents the collection and disbursement of moneys collected from privately owned lands, whilst the Special Areas Trust Account represents these transactions from public lands.

DEPARTMENT OF LANDS AND MINES

SPECIAL DISTRICTS TRUST ACCOUNT
STATEMENT OF RECEIPTS AND PAYMENTS

For the Year Ended March 31, 1942

Cash in bank, March 31, 1941		\$ 65,368.24
Receipts:		
General tax collections	\$ 359,739.30	
Funds transferred from Municipal Districts Bank Accounts	8,155.47	
Bank interest	530.30	
Reimbursement of Special Areas items charged to Special Districts Trust Account, during year ending March 31, 1941	524.44	
Miscellaneous	7,220.05	
		<u>376,169.56</u>
		\$ 441,537.80
Payments:		
School requisitions, 1941	\$ 101,675.77	
Hospital requisitions, 1941	24,670.06	
Maintenance of roads	49,619.65	
Provincial Mental Hospital	626.50	
Provincial Training School	2,157.10	
Child welfare	127.75	
Direct relief	2,828.39	
Mothers' allowances	5,479.02	
Provincial Treasurer for special administrative services	2,892.06	
Land Titles Office fees	2,522.20	
Pests and weeds	1,213.77	
Buildings	850.00	
Special Areas items charged to Special Districts Trust Account	442.20	
Miscellaneous	501.96	
Tilley East collections transferred to Dept. of Municipal Affairs	41,713.93	
Liquidation of debentures of former school districts in Special Areas	39,916.16	
Liquidation of liabilities of former municipal districts in Special Areas	298.07	
		<u>277,534.59</u>
Cash in bank, March 31, 1942		\$ 164,003.21

SPECIAL AREAS TRUST ACCOUNT
STATEMENT OF RECEIPTS AND PAYMENTS

For the Year Ended March 31, 1942

Cash in bank, March 31, 1941		\$ 34,737.23
Receipts:		
Grazing rentals	\$ 57,783.88	
Cultivation rentals	45,822.88	
Equipment rentals, 1941	21,975.78	
Province of Alberta, equipment grant	10,000.00	
Sale of buildings	8,647.82	
Bank interest	706.64	
Miscellaneous	1,825.56	
		<u>146,762.56</u>
		\$ 181,499.79
Payments:		
Purchase of equipment	\$ 22,478.66	
Equipment maintenance	12,892.98	
Community pastures	7,376.31	
International Business Machines costs	3,711.17	
Special Districts items charged to Special Areas Trust Account	687.24	
Construction of dams	277.75	
Grass seed	1,345.60	
Hay meadows	19.80	
Miscellaneous	756.52	
		<u>49,546.03</u>
Cash in bank, March 31, 1942		\$ 131,953.76

As pointed out in previous reports, it is felt that owing to extremely uncertain crop conditions in these areas, it is good policy to carry a substantial reserve in order that operations should not be curtailed during periods of extended drought.

SPECIAL AREAS ADMINISTRATION

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GOVERNMENT OF THE PROVINCE OF ALBERTA
DEPARTMENT OF LANDS AND MINES
SPECIAL AREAS AND SPECIAL DISTRICTS
CASH STATEMENT FOR THE FISCAL YEAR 1941-42
(Ending March 31, 1942)

CASH ON HAND MARCH 31, 1941 AND REVENUE FOR YEAR 1941-42:

Cash in bank, March 31, 1941—Special Districts Trust		
Account	\$ 65,368.24	
Funds transferred from Municipal District Bank Accounts	8,155.47	
<i>Special District Collections:</i>		
General tax	\$359,739.30	
Social Service taxes	56,175.64	
Interest collections on agricultural advances	2,233.50	
Miscellaneous	6,718.09	
Road maintenance applied on taxes	5,029.04	
Road maintenance applied on relief	4,717.97	
Reimbursement of Special Areas items charged to Special Districts Trust during year ending March 31, 1941	82.24	
Bank interest	530.30	
	<u>435,226.08</u>	\$508,749.79

GOVERNMENT CONTRIBUTIONS:

Cash in bank, March 31, 1941—Special Areas Trust		
Account	34,737.23	
1942 Special Areas collections on provincial lands	114,786.78	
Department of Education Special Grant	100,000.00	
Appropriation No. 1134	56,408.66	
Appropriation No. 1181	23,196.58	
Appropriation No. 1180	10,000.00	
	<u>339,129.25</u>	

TOTAL \$847,879.04

PAYMENTS:

<i>Special Districts:</i>		
Social Service taxes	\$ 56,175.64	
Schools	201,675.77	
Hospitals	24,670.06	
Administration costs	56,408.66	
Provincial Mental Hospital	626.50	
Provincial Training School	2,157.10	
Mothers' allowances	5,479.02	
Child welfare	127.75	
Direct relief	2,828.39	
Medical relief	17,446.78	
Interest on agricultural advances	2,233.50	
Charitable and hospital bills	5,749.80	
Road maintenance cash	27,643.87	
Road maintenance applied on taxes	5,029.04	
Road maintenance applied on relief	4,717.97	
Pests and weeds	1,213.77	
Buildings	850.00	
Land Titles Office fees	2,522.20	
Purchase of equipment	22,478.66	
Maintenance of equipment	12,892.98	
International Business Machine costs	3,711.17	
Liquidating liabilities of former municipal districts in Special Areas	298.07	
Provincial Treasurer for administrative purposes	2,892.06	
Tilley East collections transferred to Department of Municipal Affairs	41,713.93	
Liquidation of debentures of former School Districts in the Special Areas	39,916.16	
	<u>\$541,458.85</u>	
<i>Special Areas:</i>		
Construction of dams	\$ 277.75	
Community pastures	7,376.31	
Grass seed	1,345.60	
Hay meadows	19.80	
Special Districts items charged to Special Areas Trust		
Account	687.24	
Miscellaneous	756.52	
	<u>10,463.22</u>	

TOTAL PAYMENTS \$551,922.07

CASH BALANCE \$295,956.97

DEPARTMENT OF LANDS AND MINES

CASH BALANCE	
Special Districts Trust Account	\$164,003.21
Special Areas Trust Account	131,953.76
	<u>\$295,956.97</u>
<i>Unpaid 1941-42 Bills:</i>	
Interest on implemented loans	\$ 3,205.37
Hanna Municipal Hospital loans	7,938.25
Interest on direct loans	3,502.74
Interest on agricultural advances	27,417.79
Blind pensions paid in June, 1942	109.18
Old Age Pensions paid in June, 1942	7,791.53
Arrears of hospital requisitions (Hanna) paid in May, 1942. Compromised from \$89,695.17	22,000.00
Arrears of hospital requisitions (Vulcan) paid in May, 1942. Compromised from \$7,578.37	3,000.00
	<u>\$ 74,964.86</u>
<i>1941 Levies:</i>	
General tax	\$269,851.14
Social Service tax	34,272.78
TOTAL LEVY	<u>\$304,123.92</u>

J. HARVIE,
Deputy Minister,
 Department of Lands and Mines